

**PENNSYLVANIA**  
**MUNICIPAL RETIREMENT SYSTEM**  
COMPREHENSIVE ANNUAL FINANCIAL REPORT FOR THE YEAR ENDED DECEMBER 31, 2012



PREPARING FOR TOMORROW, TODAY **2012**

# The PMRS

## Vision

To be Pennsylvania local governments' pension administrator *of choice*.



## Mission

The Pennsylvania Municipal Retirement System seeks to help Pennsylvania's local governments, regardless of size or resources, secure the future retirement of their employees by providing comprehensive, cost efficient and professional pension administration services through a pension plan tailored to the participants' and sponsors' requirements.

# **The Pennsylvania Municipal Retirement System**

Comprehensive Annual Financial Report

For the Fiscal Year Ended

December 31, 2012

**John A. Haiko, Chairman**

Pennsylvania Municipal Retirement Board

**James B. Allen, Secretary**

Pennsylvania Municipal Retirement System

## **Office Location**

Eastgate Center

1010 North 7th Street, Suite 301

Harrisburg, Pennsylvania 17102-1400

## **Mailing Address**

P. O. Box 1165

Harrisburg, Pennsylvania 17108-1165

## **Web Address**

[www.pMrs.state.pa.us](http://www.pMrs.state.pa.us)

**Prepared by the Accounting and Operations Divisions  
of the Pennsylvania Municipal Retirement System**

# Contents

## INTRODUCTION

- 2 Letter of Transmittal
- 8 GFOA Certificate of Achievement
- Administrative Organization**
- 9 Pennsylvania Municipal Retirement Board
- 10 Staff, Consultants, & Managers
- 11 Organization Chart
- 12 Chairman's Report
- 13 Summary of Plan Provisions

## FINANCIAL

- 16 Independent Auditor's Report
- 18 Management's Discussion and Analysis

### Basic Financial Statements

- 22 Statements of Plan Net Position
- 23 Statements of Changes in Plan Net Position
- 24 Notes to Financial Statements

### Schedules

#### GASB No 25 Required Supplemental Information

- 33 Schedule 1 - Funding Progress
- 33 Schedule 2 - Required Employer Contributions
- 34 Actuarial Methods and Significant Assumptions

### Supplemental Schedules

- 35 Schedule 3 - Administrative Expenses
- 35 Schedule 4 - Investment Expenses
- 35 Schedule 5 - Payments to Consultants

## INVESTMENTS

- 38 Basis of Presentation
- 39 Report on Investment Activity
- 40 Portfolio Distribution - Five-Year Trend
- 41 Portfolio Rates of Return
- 42 Asset Allocation

### Investment Summary

- 43 Summary of Investment Expenses
- 44 Ten Largest Common Stock Holdings
- 45 Portfolio Summary
- 45 Portfolio Quality
- 46 Summary of Commissions Paid to Brokers
- 48 Investment Guidelines

## ACTUARIAL

- 52 Actuary's Certification Letter
- 54 Actuarial Liability Compared with Actuarial Value
- 55 Solvency Test
- 55 Funded Status of Actuarial Liabilities
- 56 Note to Required Supplementary Information
- 56 Schedule of Retirees and Beneficiaries
- 57 Schedule of Total Membership
- 57 Funded Status of Actuarial Liabilities
- 58 Schedule of Active Member Valuation Data
- 58 Actuarial Assumptions & Methods
- 62 Assumption Analysis

## STATISTICAL

### Part I - Financial

- 64 Introduction
- 64 Number of Members Per Plan (Plans with 100+ Members)
- 65 Changes in Net Position
- 65 Revenues by Source
- 66 Expenses by Type
- 66 Schedule of Benefit Deductions from Plan Net Assets by Type
- 66 Schedule of Refund Deductions from Plan Net Assets by Type
- 67 Revenues by Source: Ten-Year Trend
- 67 Expenses by Type: Ten-Year Trend
- 67 Revenues vs. Expenses: Ten-Year Trend
- 68 Total Investments: Ten-Year Trend

### Part II - Membership

- 68 Total Membership: Ten-Year Trend
- 69 Active Members: Ten-Year Trend
- 69 Retired Members: Ten-Year Trend
- 70 Distribution of Active Members - Counts
- 70 Distribution of Active Members - Average Salary
- 71 Pensions in Payment Status on January 1, 2012 by Type and by Monthly Amount
- 72 Pensions Awarded Each of Last Ten Years by Type and by Amount
- 72 Schedule of Total Membership: Ten-Year Trend
- 73 Schedule of Active Member Valuation Data
- 74 Schedule of Average New Monthly Benefit Payments from Defined Benefit Plans
- 75 Schedule of Participating Pension Plans



**TODAY**

**TOMORROW**

**YESTERDAY**

**"Happy is the person who knows what to remember of the past, what to enjoy in the present, and what to plan for in the future."**

**~Arnold S. Glasow**

**INTRODUCTION**

## Letter of Transmittal



P.O. Box 1165, Harrisburg, PA 17108-1165

June 28, 2013

Pennsylvania Municipal Retirement Board  
Pennsylvania Municipal Retirement System  
P.O. Box 1165  
Harrisburg, Pennsylvania 17108-1165

Consistent with the agency's commitment to full financial disclosure, we are honored to submit the Pennsylvania Municipal Retirement System's (the System) Comprehensive Annual Financial Report for the fiscal year ended December 31, 2012. As required by the Pennsylvania Municipal Retirement Law, Act of 1974, P.L. 34, No. 15 (the Act) as amended, the System distributes the Comprehensive Annual Financial Report (CAFR) to our governing board, to the members of the General Assembly of Pennsylvania, to each participating municipal employer, and to all other interested parties upon request. The CAFR is also published on the System's website. The System is solely responsible for the accuracy of the data in this report. As the two individuals primarily responsible for the System's financial records, we offer our assurances that we have made every effort to present a comprehensive report. To the best of our knowledge, the enclosed information is accurate in all material respects.

### OVERVIEW OF THE SYSTEM

The Pennsylvania Municipal Retirement System, which is an agent multiple-employer system, is headquartered in Harrisburg, Pennsylvania. The System is a state retirement agency created by act of the Pennsylvania General Assembly in 1974. Responsibility for the organization and administration of the System is vested in the eleven-member Pennsylvania Municipal Retirement Board (the Board).

The System administers sound, cost-effective pension plans on a contracted basis for local government employees throughout the Commonwealth. Our services include accounting services, actuarial valuations,

employee consultation and record keeping, and asset management. Any Pennsylvania county, city, town, township, borough, municipal authority, or institution supported and maintained by a municipality may participate. The Statistical Section of this report lists all participating plans as of January 1, 2012.

The System offers various plan designs: defined benefit, cash balance, and hybrid. The annual benefit is dependent upon the individual municipality's contracted benefit package. Each pension plan is designed based on the plan sponsor's specific needs. Benefits provided to participants in the System are typically dependent upon both age and service requirements. In addition to standard monthly pension benefits, plans routinely include provisions for vesting, disability benefits, survivor benefits, and death benefits. A plan's cost is determined by the individual plan's benefit structure, demographics and financial condition. The System's individual plans may have an employer contribution and an employee contribution or just an employer charge. Employer contributions typically range from 4% to 12% of projected payroll for municipal employees and from 12% to 20% for police and firefighters. The employee contribution is determined by plan contract. In 2012, plan requirements ranged from no employee contribution to as high as 7.5% of earnings.

### ECONOMIC ENVIRONMENT

Calendar year 2012 had much to offer those who monitor economic statistics and attempt to prognosticate based upon their reading of the numbers and trends. Viewing the economies of the world as a "global team", when one player failed to perform, it appears another player was ready to step in and keep things going in the right direction. Although a star performer never emerged, the team play resulted in a victory.

As the year began, investors seemed to be focused on where 2012's markets would go based on two different, but related, economies: the United States and



Europe. In the United States, dropping oil prices, stable inflation trends and the possible end to the domestic housing market decline were positive trends not to be ignored. The Federal Reserve continued to pump billions of dollars into the economy and kept short-term borrowing rates at record lows. However, the drag on the US economy was faltering predictions of economic growth rates (lower GDP growth rates for the full year), a moderating trend in manufacturing, job growth below 100,000 a month, and declining consumer confidence.

Still, the US economy looked good when compared to its global teammate, Europe. While Greece allowed many to breathe a big sigh of relief by deciding narrowly to stay in the European Union (EU), and Spain seemed to be taking its lead from the US domestic TARP program by providing a banking bailout of its own, global investors could not seem to gain trust in the future of the European economy. Countering the positive news from Greece was the reality that the country was in a depression. Meanwhile, Italy caused investors apprehension with its continued political and economic turmoil.

One question kept recurring, “which economy would provide the path to financial stability and long-term growth”? Well into the year, it looked like the answer was obvious – the United States economy seemed to finally be in a breakout pattern. The September job numbers surprised all with a significant drop in unemployment, home sales and home prices were actually on the upswing, the Fed’s QE3 was announced, and borrowing remained unbelievably inexpensive. Meanwhile, core inflation was still not a factor for concern, and the result translated into worldwide hope. The European Central Bank added its commitment “to do what it takes” to get the European economies back on track. Momentum was clearly swinging to the positive and the competition for leading the world’s economies on a path of sustained growth seemed competitive.

The fourth quarter saw the European markets take the lead as the United States political leaders caused the domestic economy to stumble. If nothing else, the “Fiscal Cliff” was given the major blame for the dramatic drop in United States consumer confidence seen in the fourth quarter and the shocking drop in growth at the end of the third quarter to a negative

0.1%. Many analysts saw a number of reasons for judging the economy to be solid and the markets to be positive; but, the failure of Congress and the President to address the “Fiscal Cliff” until January 2, 2013 was just too much for the fourth quarter markets to tolerate, and the domestic markets shuddered.

The year reflected mildly positive news being constantly, and consistently, dampened by counter intuitive numbers and political actions. The net impact on the world’s economies was a restrained pattern of growth. The surprising results were that the markets – all markets – turned in solid returns. The question at year end was whether the economic indicators – housing starts, home prices, GDP, and inflation – reflected the true economic conditions of the country’s constituencies. Concern for stubbornly high unemployment, a major reason for the Fed’s priming the liquidity pump, pleased investors but caused concern about the long-term economic impact it would have on the country.

## FINANCIAL INFORMATION

The System’s financial statements were prepared in accordance with generally accepted accounting principles of the United States of America. The financial statements and the required supplementary information in the report have been prepared in accordance with the standards for disclosure following GASB Statement No. 25, 31, 34, 37, 40, and 50 guidelines. The independent auditor’s report is located in the Financial Section on page 16 and the Management’s Discussion and Analysis commences on page 18.

The accrual basis of accounting is used to record all financial transactions including assets, liabilities, revenues, and expenses. Gains and losses on sales and exchanges of investments are recognized on the transaction date. Significant accounting policies are detailed in the Financial Section under “Notes to Financial Statements.”

The System’s net assets totaled \$1,661,926,239 as of December 31, 2012. In 2012, the System’s net assets increased by \$171,757,135. Investment-related gains increased the portfolio by \$187,755,253 and contributions added \$59,253,955. Benefit payments and administrative expenses reduced the total assets by \$75,252,072. Additional information is detailed in the

Financial Section (“Statements of Plan Net Position” and “Statements of Changes in Plan Net Position”) located on page 22 and 23.

The System has established internal computerized control policies and procedures for the review and verification of all receipts and payments made to and from the fund. In addition, the System’s staff prepares a yearly budget which must be adopted by the Board. The budget is also presented to and reviewed by the Local Government Committees of the Pennsylvania House and Senate at least two months prior to the beginning of the fiscal year. The committees can approve the budget, reject it, or take no action by the end of the year in which case the proposed budget becomes final. Budgetary controls include monthly review and presentation by management with bimonthly Board reviews. The 2012 administrative budget was adopted in September 2011 and set at \$3.60 million exclusive of investment fees. Expenditures (exclusive of investment fees) in 2012 amounted to \$3,424,363. More information on the System’s expenses is included in the Financial Section of this report (“Schedule 3 - Administrative Expenses”).

## REVENUES

The System was established by law to pay pension benefits when due. It accumulates sufficient funds to pay benefits through employee contributions, employer contributions, and investment earnings. The following schedule presents a summary of revenues for the fiscal year ending December 31, 2012, and also shows the amount and percentage of increases and decreases in relation to December 31, 2011, revenues.

Municipal contributions are based upon an actuarial valuation, using the Entry Age Normal Actuarial Cost Method, computed as a percentage of the total compensation of all active members during the period for which the amount is determined.

Member contributions vary according to the type of pension plan. Under Articles II and III of the Act, members are required to contribute 3% to 8% of their salary. The amount a member contributes under Article IV of the Act is based upon contracted plan provisions and is principally expressed as a percent of compensation or salary.

Investment revenues are a combination of earnings from bonds, equities, real estate, and a short-term cash management fund. During the 2012 fiscal year, the fair value of the System’s investment portfolio increased from \$1,489,842,224 to \$1,663,443,325. The largest increase of investment revenue came from an appreciation of equities.

The final portion of revenue is derived from assessments. Each municipality is charged a \$20 assessment per member to help cover administrative expenses incurred by the System. Any fluctuation in assessments is caused by the number of members per municipality and can be affected by employee turnover or new plans being added or plans leaving the System in previous years.

Ten-year historical trend information listing the System’s revenues by source is presented in Part I of the Statistical Section of this report.

### Revenues

Additions to Plan Net Assets	2012 Amounts	Percent of Total	2011 Amounts	Increase (Decrease) from 2011	Percent of Increase (Decrease)
Member Contributions	\$ 20,981,612	8.49%	\$ 20,732,344	\$ 249,268	1.20%
Municipal Contributions	37,974,023	15.37	40,231,586	(2,257,563)	(5.61)
Assessments	298,320	0.12	301,571	(3,251)	(1.08)
Investment Income/(loss)	187,755,253	76.01	(29,086,613)	216,841,866	745.50
<b>Total</b>	<b>\$247,009,208</b>	<b>100.00%</b>	<b>\$32,178,888</b>	<b>\$214,830,320</b>	<b>667.61</b>

### Expenses

Deductions from Plan Net Assets	2012 Amounts	Percent of Total	2011 Amounts	Increase (Decrease) from 2011	Percent of Increase (Decrease)
Annuity benefits	\$63,390,100	84.24	\$63,105,165	\$ 284,935	(0.45)
Terminations	8,437,610	11.21	18,050,718	(9,613,108)	53.26
Administrative	3,424,363	4.55	3,142,004	282,359	(8.99)
<b>Total</b>	<b>\$75,252,072</b>	<b>100.00%</b>	<b>\$84,297,887</b>	<b>\$(9,045,815)</b>	<b>10.73</b>



## EXPENSES

The System's primary expense represents the purpose for which it was created: payment of benefits. The schedule on page 4 presents a summary of the System's expenses for the fiscal year ending December 31, 2012, and shows the percentage of increases and decreases in relation to December 31, 2011 amounts. The major expense-related items for 2012 were payment of benefits, refunds of withdrawing plans, refunds of contributions due to termination or death, and administrative expenses. A breakdown of the System's expenses including ten-year historical trend information is presented in Part I of the Statistical Section of this report.

## INVESTMENT HIGHLIGHTS

The time-weighted rate of return for the System's investments during the fiscal year ended December 31, 2012 was 13.2%, ranking in the 45th percentile of the Independent Consultants Cooperative (ICC) Universe. The cumulative ten-year return was 7.7% on an annualized basis and ranked in the 25th percentile. While there is some concern about the long-term investment return not meeting the actuarial assumed rate of 6.0%, the PMRS Board will continue to monitor this situation.

The return by asset class and their weighting in the portfolio are as follows: Large Cap Domestic Equity returned 16.4% (Class as percentage of portfolio: 24.9%); Fixed Income produced 4.3% (19.5%); Small Cap Domestic Equity yielded a return of 16.1% (14.5%); International Equity returned 22.8% (13.7%); Real Estate produced 8.5% (14.9%); and the International Emerging Markets asset class had an annualized return of 18.9% (9.7%) At the year-end, the portfolio had a commitment in cash equivalents representing 2.8% of the portfolio.

## FUNDING

The System's level of funding is based on the actuarial reserve method. Funds are derived from the excess of revenues over expenses and are accumulated by the System in order to meet current and future benefit obligations to retirees and beneficiaries. As the funding level increases, the assets accumulate and strengthen the investment income potential. The increase in net assets for the 2012 fiscal year was \$171,757,135. This represents an increase in the fund balance of 11.5% over the 2011 fund balance.

To comply with GASB Statement No. 25 disclosure requirements, the "Schedule of Funding Progress" was calculated based on the most recent actuarial valuation dated January 1, 2012. The funded ratio increased from 102.4% at January 1, 2011 to 103.8% as of the last valuation date of January 1, 2012. In aggregate the System is in a net surplus where the actuarial value of assets exceeds the actuarial liability. That surplus has increased from \$39.8 million as of January 1, 2011 to \$65.6 million as of January 1, 2012. As illustrated in the schedules under "Required Supplementary Information," the System's funded ratio in relation to the System's current actuarial value of assets is adequate to fund the System's actuarial accrued liabilities. Additional information on the System's actuarial value, liabilities, and funding progress can be found in the Actuarial and Financial Sections of this report. As an agent multiple-employer Public Employee Retirement System (PERS), the System reports to each of the trustees of the plans it administers, providing the governing authority of the member plans with complete actuarial, accounting, and funding data. Detailed information on the System's plan funding can be found in the Financial Section (Schedules 1 and 2) and the Actuarial Section of this report on page 52.

## MAJOR INITIATIVES

The major initiatives undertaken by the Board and management staff at the System during the year involved "transitions." On the personnel front, the Board addressed several key retirements early in the year. Longtime Chief Counsel Gerald Gornish retired in February. While his able replacement, Michele Ferencz, was soon named by Governor Corbett, this was just one of a number of managers to retire during the year. The management team saw two senior employees retire in the first quarter of the year; and, while replacements were found, the process remained an arduous one.

The System also prepared for several other transitions in 2012, although the implementation of the changes was not to be felt until 2013 and beyond. One of the most significant issues addressed by the Board was the reduction in the assumed actuarial investment return from six percent (6.0%) to five and five tenths percent (5.5%) effective January 1, 2013. According to the Pennsylvania Municipal Retirement Law, Act

15, of 1974, the actuarial assumed rate of return must also be the regular interest rate credited to all of the members' and the municipalities' accounts.

The action to change the rate was taken as a step in the process towards bringing the System back to a fully funded status. Because of the impact of the market losses in 2008 and 2011, the System's actuarial assets were approximately 15% above the actual market value of the System's investments. While the Board and management believe the System was on solid financial ground, the ability to have market values equal or exceed actuarial values was seen as an important reflection of the overall System's stability. Reducing the regular interest rate was seen as a way to reach that position sooner rather than later.

Another matter considered by the System was the transitioning of the responsibilities of the Secretary to several additional individuals. The System has, from its creation, relied upon the Secretary to serve as the relationship manager between the System's investment managers and the Board. Recognizing that the fund's growth to over \$1.6 billion meant that this responsibility was nearing a full time commitment, the Board created a new position, the Investment Relationship Manager.

The Board also spent time in 2012 preparing for the implementation of the Governmental Accounting Standards Board's (GASB) Statements 67 and 68 (Financial Reporting for Pension Plans and Accounting and Financial Reporting for Pensions). While these statements were only issued in August of 2012, their impact on the operations of the System is expected to be significant. The Board took steps to prepare for these applications to our membership.

One final initiative addressed in 2012 was the realignment of the office space with a new layout and new voice over internet protocol telephone system being implemented. These changes were to accommodate modest staff growth in the next two years.

The implementation of a previous year's initiative also needs to be recognized. In 2012 the System saw its first participant in a Deferred Retirement Option Program or DROP. Authorized by state legislation in 2010, the Board adopted a program in 2011. During 2012, the System saw a number of plans formally ap-

prove this benefit provision, and the System successfully installed new software to manage the tracking of DROP participants and their ultimate benefits.

## **PROFESSIONAL SERVICES**

The financial information in this report has been audited by the independent accounting firm of CliftonLarsonAllen LLP, which is completing year three of a five-year contract. The actuarial information was prepared with the help of K. Kent, consulting actuary from Cheiron. Cheiron has completed year one of a five-year competitively bid contract. The investment information was prepared with the cooperation of the System's independent investment consultant, R. Dahab of Dahab Associates. This firm is completing year four of a five-year contract that was competitively bid. The Board and staff sincerely appreciate the cooperation and commitment of these three advisors in providing information for the preparation of this report.

## **INTERNAL CONTROLS**

The management of the System is responsible for and has implemented systems of internal accounting controls. These controls are designed to provide reasonable but not absolute assurances for the safeguarding of assets and the reliability of financial records. It should be recognized, however, that all internal controls have inherent limitations. These limitations exist because of several factors, including cost and the potential for controls to be overridden by management. To mitigate the risk caused by these inherent limitations, the System monitors the adequacy and effectiveness of the System's internal control structure. We believe that the internal accounting controls currently in place are adequate to meet the purpose for which they were intended. We also believe the financial statements, supporting schedules and statistical tables to be fairly presented in all material respects. Also, our independent external auditor CliftonLarsonAllen LLP, conducts an annual audit of the financial statements in accordance with generally accepted auditing standards. Their audit includes tests and procedures designed to provide reasonable assurance that the financial statements are fairly presented.

## ACKNOWLEDGMENTS

While it may seem routine to some to express an acknowledgement of appreciation to those who have assisted in the preparation, compilation, and publication of a Comprehensive Annual Financial Report, let us attempt to dispel this notion. The CAFR is the physical record of many hours of work by bright professionals who toil for the benefit of all the System's members. The CAFR should be the ultimate story of the dollars and cents associated with the System's operations and programs. Without a complete, clear, and honest tracking of those transactions, there would never be trust in our product. We sincerely want to express our appreciation to all those who participated in the preparation of this CAFR and the transactions it memorializes.

We especially want to recognize our System's Accounting Division: Diane Bamford, Patricia Falk, Sue Golembiewski, Tonna Hoot, and Mike Landry. Tracing the transactions, documenting their validity, and summarizing the information in clean and crisp charts starts and ends with the Accounting team.

Making the document readable and as error free as humanly possible starts and ends with a good editor. Again, we are pleased to be able to draw upon the skills of Tom Garrett from the Operations Division to serve in this capacity. Tom's devotion to PMRS, and the publishing of the CAFR, is what makes this report come to life.

When the staff is as lean as it tends to be with the System, our reliance on third party contractors, consultants, and compatriots is all the more important. PMRS relies on a number of consultants to effectively manage the System and to efficiently tell our story. These consultants have made numerous contributions to the presentation of this CAFR. Our recognition starts with the professionals at CliftonLarsonAllen LLP. Two other firms that have consistently and professionally served and guided the System are the specialists at the actuarial firm of Cheiron, Inc. and the team at our investment-consulting firm of Dahab Associates, Inc. Their assistance is an essential part of our success.

Finally, all organizations need to have a strong hand that guides the team, and PMRS is no different. We are able to do our duties thanks to an able body of

men and women who serve on the PMRS Board. Their dedication and commitment to you, our members, is what sets the bar for staff. These volunteers, influential in their community and leaders among their peers, are dedicated to one purpose, seeing that our members' retirements are safe, secure, and there for them when they need it. This fiduciary duty is borne with distinction by our Board.



James B. Allen  
Secretary

Donna L. Miller  
Chief of Accounting

# Certificate of Achievement for Excellence in Financial Reporting

Presented to

## Pennsylvania Municipal Retirement System

For its Comprehensive Annual  
Financial Report  
for the Fiscal Year Ended  
December 31, 2011

A Certificate of Achievement for Excellence in Financial Reporting is presented by the Government Finance Officers Association of the United States and Canada to government units and public employee retirement systems whose comprehensive annual financial reports (CAFRs) achieve the highest standards in government accounting and financial reporting.



*Christopher P. Morvill*

President

*Jeffrey R. Emer*

Executive Director

# Pennsylvania Municipal Retirement Board

as of December 31, 2012



**1 John A. Haiko**  
Chairman

Represents Pennsylvania State Association of Township Supervisors

**2 Paul Corbin**  
Vice-Chairman

Represents Pennsylvania State Association of County Commissioners

**3 Carol Aichele**

Secretary of the Commonwealth



**4 Duane L. Filchner**

Represents Pennsylvania Municipal Authorities Association

**5 William J. Junkin III**

Represents Active Fire Fighters enrolled in PMRS

**6 Robert M. McCord**

State Treasurer (ex-officio) represented by Sandy Leopold

**7 David Perruso**

Represents Pennsylvania State Association of Boroughs

**8 Barry Sherman**

Represents Active Police Officers enrolled in PMRS



**9 Vacant**

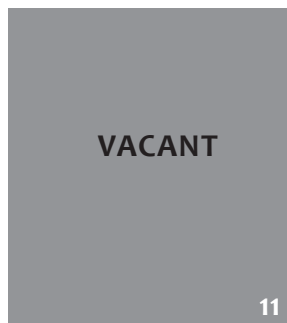
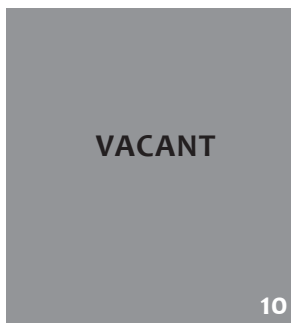
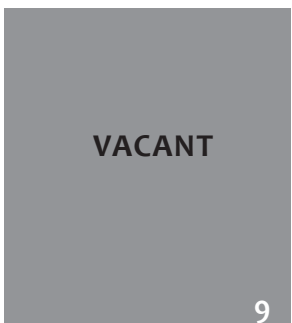
Represents Pennsylvania State Association of Township Commissioners

**10 Vacant**

Represents Retired Members enrolled in PMRS

**11 Vacant**

Represents Pennsylvania Municipal League





# Staff, Consultants, & Managers

as of December 31, 2012

## Administrative Staff

### Secretary

James B. Allen

### Assistant Secretary

Kristine M. Cline

### Accounting Division Chief

Donna L. Miller

### Information Technology Office Chief

Michael G. Mortimer

### Membership Services Division Chief

Sean E. Christine

### Municipal Services Division Chief

Anthony M. Pinto

### Operations Division Chief

Wanita J. Campbell

## Professional Consultants

### Actuary

Cheiron  
McLean, VA  
Kenneth Kent, FSA, FCA, MAAA, EA

### Auditor

CliftonLarsonAllen LLP  
Timonium, MD  
Thomas G. Heseltine, CPA, Partner

### Comptroller

Commonwealth of Pennsylvania  
Harrisburg, PA  
Joseph Natoli, Central Services

### Investment Consultant

Dahab Associates, Inc.  
Bay Shore, NY  
Richard E. Dahab, CFA, President

### Legal Counsel

Commonwealth of Pennsylvania  
Harrisburg, PA  
Michele Ferencz, Chief Counsel

### Master Custodian

BNY Mellon  
Pittsburgh, PA  
Gordon Sapko, Relationship Manager

## Investment Managers <sup>(1)</sup>

### BMO Global Asset Management

Milwaukee, WI  
Thomas J. Nolte, Senior Vice-President

### Brandywine Global Investment Management, LLC

Philadelphia, Pa  
Bill Roach, Group Product Specialist

### DePrince, Race, & Zollo

Winter Park, FL  
Katie Byrne, Portfolio Manager - Client Services

### Emerald Advisors, Inc.

Leola, PA  
John V. Thompson, Senior Vice-President

### Forest Investment Associates, Inc.

Atlanta, GA  
V. Scott Bond, Director of Marketing & Client Relations

### HGK Asset Management, Inc.

Jersey City, NJ  
Steven J. Gervasio, Marketing Director

### Johnston Asset Management

Stamford, CT  
Cassandra A. Hardman, Portfolio Manager

### LSV Asset Management

Chicago, IL  
Keith W. Bruch, Director of Client Portfolio Services

### Polen Capital Management

Boca Raton, FL  
Stan C. Moss, Chief Operating Officer

### Prudential Real Estate Investors

Madison, NJ  
Larry Teitelbaum, Principal, Marketing and Client Services

### State Street Global Advisors

Boston, MA  
James Thorsen, Vice-President

### TIAA-CREF Global Real Estate

New York, NY  
Susan L. Amato, Managing Director

### UBS Global Asset Management

Chicago, IL  
Steven E. Wilde, Managing Director

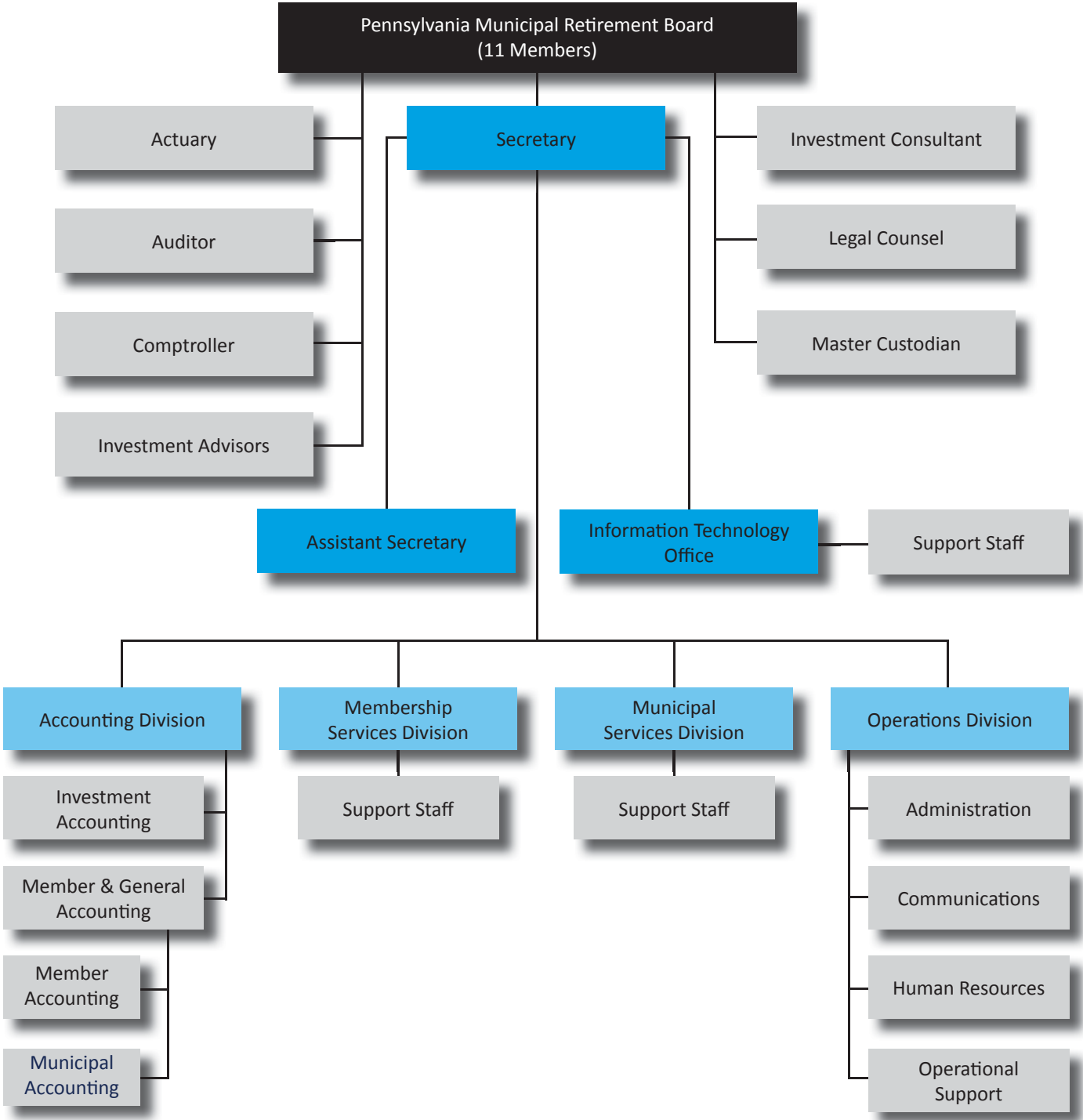
### WHV Investment Management

San Francisco, CA  
Brian W. Forth, Vice-President

<sup>(1)</sup> Manages the long-term portfolio of investments reported on the Statement of Plan Net Position. All information in the Investment Section pertains to the activity of these investment managers.



# Organization Chart



## Chairman's Report



P.O. Box 1165, Harrisburg, PA 17108-1165

June 28, 2013

Dear Members:

It is with a sincere sense of accomplishment and some pride that I share with you the Pennsylvania Municipal Retirement System's 2012 CAFR. In this report you will have the opportunity to read about how the Board has acted as trustees of your pension future. The pride arises from the position in which the agency finds itself. The year saw continued growth in plan assets, a solid return from the trying times the investment markets offered in the previous year, and most importantly for you – a growth in the underlying strength of the System. One only has to turn on the television or open a newspaper and they will be advised as to how fragile this state's or that city's pension plan's funded status is. While it is a little more difficult to grasp as each enrolled plan has its own actuarial status or level of funding, what should be reassuring to you, and to the public, is that PMRS is clearly a pension system that is not at risk. The agency's financial standing has only been strengthened by the actions taken by my fellow board members and our trusted consultants and advisors during 2012.

I encourage you to read the full report and learn about the System's strength. I believe you will first, above all else, be pleased by the openness and candor with which the agency's operations are revealed. Our commitment to a transparent operations stems from a belief that the more you know about the agency, the more you will appreciate it. Should you have questions concerning any of the numbers or facts reported,

I encourage you to contact us – by phone, by mail, by e-mail. We want you to know that your inquiries, comments, and suggestions are always appreciated.

I thank you for allowing us to provide for your pension needs.

Yours Truly,

A handwritten signature in black ink that reads "John A. Haiko". The signature is written in a cursive style with a large, prominent "J" and "H".

John Haiko,

Chairman

Phone: (717) 787-2065

(800) 622-7968

Fax: (717) 783-8363

**Our Vision:** To be Pennsylvania local governments' pension administrator *of choice*.

### INTRODUCTION

The System offers a variety of alternative pension plans. Municipalities may design their own pension benefit structures. Most municipalities select this option and work with the System to create a combination of benefits that meet the individual needs of the municipality and its employees. Additionally, the System has two basic benefit plans designed by the State General Assembly: one for municipal employees and one for police and firefighters.

### SUPERANNUATION AND EARLY ANNUITY ELIGIBILITY BENEFITS

Under the basic plans, the minimum normal retirement age is 65 for municipal employees and 55 for police and firefighters. A member may retire early at any age after 24 years of service. Under an optional plan design, a municipality may choose any age or service requirement permitted under its particular municipal code. Early retirement under the optional plan may also be designed to meet the needs of the municipality.

There are two approaches to accumulating retirement benefits. Under the cash balance approach, the benefit accrues based on the level of contributions and the investment earnings credited to the fund. The defined benefit approach depends upon the individual's age, years of credited service, and an actual benefit formula which usually includes a salary factor.

### DISABILITY ANNUITY ELIGIBILITY BENEFITS

The majority of plans have a disability benefit that allows a member who is unable to work because of serious injury or illness to apply for a disability annuity. The application and required medical documentation will be reviewed by the Board and the System's medical examiners to determine whether the member is eligible for the disability benefit.

A disability that results directly from doing one's job is classified as a service-connected disability. A disability that is not caused by one's work is termed a non-service disability.

Conditions for disability benefits are defined in the municipality's contract. The System's basic plans provide for (1) a service connected disability annuity of 50% of the disabled individual's final average salary offset by worker's compensation, and (2) a non-service disability with a minimum of 10 years' service and a 30% final average salary annuity.

### VESTING ANNUITY ELIGIBILITY BENEFITS

Conditions for vesting are defined in the municipality's contract. The basic plans have a twelve-year service requirement for vesting.

A member who terminates service before retirement may elect to leave the member's accumulated contributions in the System and defer receipt of benefits until normal retirement age. Then when the member receives the vested benefits, checks will include the member contributions and the municipal contributions.

### BENEFIT PAYMENT OPTIONS

Depending on the municipality's contractual agreement, employees may elect to receive their monthly retirement allowance from a list of options. Typical options are as follows:

- ◆ Single Life Annuity: Provides a continual income throughout the annuitant's lifetime with no beneficiary benefit
- ◆ Option 1: Reduced lifetime benefit with remaining lump sum value of account to beneficiary
- ◆ Option 2: Joint and 100% survivorship annuity
- ◆ Option 3: Joint and 50% survivorship annuity

<sup>(1)</sup> Descriptions are not identical to those in the audit report. Information has been rewritten for ease of understanding.

### **DEATH BENEFIT ELIGIBILITY**

A death benefit provides some continuation of payment or presentation of benefits to a beneficiary given certain eligibility requirements of the covered individual. If an active member or vestee with minimum years of service dies, the death benefit goes into effect provided the municipality has included this feature in its plan.

### **TERMINATION OF SERVICE**

A member always receives the accumulated deductions and interest earned at the regular interest rate which is currently at 6.0%. Depending upon the municipality's contract structure, the member might also receive excess investment monies upon withdrawal.

If a member terminates employment and goes to work for another municipality which is a member of the System, the employee may transfer the service credits unimpaired to the new municipal employer.



**TODAY**

**TOMORROW**

**YESTERDAY**

**FINANCIAL**

**“The wise man must remember that while he is a descendent of the past, he is a parent of the future.”**

**~Herbert Spencer**

## Independent Auditor's Report



CliftonLarsonAllen LLP  
www.cliftonlarsonallen.com

Pennsylvania Municipal Retirement Board  
Pennsylvania Municipal Retirement System  
Harrisburg, Pennsylvania

We have audited the accompanying financial statements of the Pennsylvania Municipal Retirement System (the System), which comprise the statements of plan net position as of December 31, 2012 and 2011, and the related statements of changes in plan net position for the years then ended, and the related notes to the financial statements, as listed in the table of contents.

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the System as of December 31, 2012 and 2011, and the respective changes in its financial position for the years then ended in accordance with accounting principles generally accepted in the United States of America.



Accounting principles generally accepted in the United States of America require that the management's discussion and analysis, the schedules of funding progress, required employer contributions and actuarial methods and significant assumptions, as listed in the table of contents, be presented to supplement the financial statements. Such information, although not a part of the financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the financial statements, and other knowledge we obtained during our audits of the financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Our audits were conducted for the purpose of forming an opinion on the System's financial statements. The additional information, including the schedules of administrative expenses, investment expenses, and payments to consultants, as listed in the table of contents, is presented for purposes of additional analysis and is not a required part of the financial statements.

The additional information, as listed in the table of contents, is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. Such information has been subjected to the auditing procedures applied in the audits of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the additional information, including the schedules of administrative expenses, investment expenses, and payments to consultants, as listed in the table of contents, is fairly stated, in all material respects, in relation to the financial statements as a whole.

The introduction, investments, actuarial and statistical sections, as listed in the table of contents, have not been subjected to the auditing procedures applied in the audits of the financial statements, and accordingly, we do not express an opinion or provide any assurance on it.

*CliftonLarsonAllen LLP*

Harrisburg, Pennsylvania

June 26, 2013

## Management's Discussion and Analysis

This section presents management's discussion and analysis of the Pennsylvania Municipal Retirement System's (PMRS, the System) financial performance for the fiscal years ended December 31, 2012 and 2011. It is presented as required supplemental information to the financial statements.

### OVERVIEW OF FINANCIAL STATEMENTS

The System administers sound, cost-effective pension plans on a contracted basis for local government employers throughout the Commonwealth. Our services include accounting services, actuarial valuations, employee consultation and record keeping, and asset management. Any Pennsylvania county, city, town, township, borough, municipal authority, or institution supported and maintained by a municipality may participate. The Statistical Section of this report lists all participating plans as of January 1, 2012.

The Statements of Plan Net Position provide a snapshot of the financial position of PMRS at December 31, 2012, including comparative amounts for the prior year.

The Statements of Changes in Plan Net Position summarize the System's financial activities that occurred during the fiscal period from January 1, 2012 to December 31, 2012, including comparative amounts for the prior year.

The Notes to Financial Statements provide additional information that is essential to a full understanding of the financial statements. The notes are an integral part of the financial statements and include detailed information not readily evident in the basic financial statements.

The Required Supplementary Information immediately following the Notes to Financial Statements provide two schedules showing historical information concerning the funded status of PMRS and the employers' contributions.

The remaining supplementary schedules provide additional detailed information concerning the operating expenses, investment expenses, and payments to

non-investment consultants. All of this supplemental information is considered useful in understanding and evaluating the financial activities of PMRS.

### FINANCIAL HIGHLIGHTS

- ◆ The System's plan net assets increased by \$172 million from \$1,490 million at December 31, 2011 to \$1,662 million at December 31, 2012. The System's plan net assets decreased by \$52 million from \$1,542 million at December 31, 2010 to \$1,490 million at December 31, 2011. The changes in market value are recognized as part of the net appreciation/depreciation in the fair value of investments.
- ◆ The funded ratio increased from 102.4% at January 1, 2011 to 103.8% as of the last valuation date of January 1, 2012. In aggregate the System has been in a net surplus where the actuarial value of assets exceeds the actuarial liability. That surplus has increased from \$39.8 million as of January 1, 2011 to \$65.6 million as of January 1, 2012.
- ◆ The rate of return for the year ended December 31, 2012 was a net gain of 13.2% compared to net loss of 1.9% and net gain of 13.8% for the years ended December 31, 2011 and 2010, respectively.
- ◆ Total employee and employer contributions decreased from \$61.2 million in 2011 to \$59.3 million in 2012, primarily due to a decrease in employer required contributions. Total employee and employer contributions decreased from \$61.9 million in 2010 to \$61.2 million in 2011.
- ◆ Total pension plan benefit payouts decreased by 12% from \$81.2 million in 2011 to \$71.8 million in 2012. Total pension plan benefit payouts increased by 28.0% from \$63.4 million in 2010 to \$81.2 million during 2011. The fluctuation in benefit payouts is primarily due to plan withdrawals in 2012, 2011 and 2010 with total assets of \$18.5 thousand, \$13.4 million, and \$3.8 million respectively.

- ◆ Administrative expenses increased by \$0.28 million to \$3.42 million for 2012. Expenses decreased by \$0.04 to \$3.14 million for 2011 and decreased \$0.02 million to \$3.18 million in 2010. Administrative expenses were within PMRS' budgeted amounts for all three years.

### FUNDED STATUS

PMRS uses an actuarial reserve method of funding that is financed by member contributions, employer contributions, and earnings from invested assets. The System has historically chosen to have actuarial valuations performed bi-annually. The January 1, 2012 actuarial valuation was derived from actual values for the four defined benefit plans that are required to redetermine contribution levels bi-annually on even years and actuarial adjustments to the January 1, 2011 liabilities for those municipalities required to redetermine contribution levels bi-annually on odd years. The January 1, 2011 liabilities were adjusted to reflect January 1, 2012 actual active counts to estimate the liabilities for these plans to provide an overall measure of the funded status of the System.

As part of a valuation, the progress toward funding pension obligations of the retirement system is measured by comparing the actuarial value of assets to the actuarial accrued liability. This measurement is referred to as the funded ratio or funded status. PMRS is 100% funded, which is one indicator of the financial soundness of the plan. The most recent actuarial valuation reports that PMRS is 103.8% funded as of January 1, 2012.

### INVESTMENTS

PMRS is a long-term investor and the Board manages the Fund with long-term objectives in mind. A primary element of PMRS' investment philosophy is that diversification among various asset classes is the best way to achieve its goals. PMRS makes estimates of future long-term market returns and establishes an asset allocation plan taking into account the risk associated with each asset class as well as the financial objectives of the Fund.

For 2012, the System's rate of return on investments was a net gain of 13.2% which is primarily attributable to an increase in fair value in the domestic and international equity markets and real estate investments. The annualized rate of return over the past three and five years ended December 31, 2012 was 8.2% and 2.5%, respectively. The Fund's long-term actuarial investment return assumption is 6.0%.

At the November 15, 2012 meeting, the Board changed the assumed rate of return from six percent (6%) to five and five tenths percent (5.5%) annual rate of return net of all expenses and adopted this figure as the regular interest rate to be credited by the System starting January 1, 2013.

### SHORT-TERM

Short-term investments increased by approximately \$14.8 million from December 31, 2011 to December 31, 2012 and decreased approximately \$19.5 million from December 31, 2010 to December 31, 2011. Neither the increase for 2012, nor the decrease for 2011 were intentional but rather represented the normal cash flow necessary to meet expenses and to fund managers.

### FIXED INCOME

Fixed income increased by approximately \$25.2 million from December 31, 2011 to December 31, 2012, primarily due to change in fair value. Fixed income increased approximately \$21.5 million from December 31, 2010 to December 31, 2011, also primarily due to change in fair value.

### COMMON AND PREFERRED STOCK

Common and preferred stock including international stock increased approximately \$114.6 million from December 31, 2011 to December 31, 2012 and decreased approximately \$85.3 million from December 31, 2010 to December 31, 2011, due to changes in fair value in the domestic and international equity markets.

### **REAL ESTATE EQUITY**

Real estate equity increased approximately \$11.0 million from December 31, 2011 to December 31, 2012, and also increased approximately \$36.5 million from December 31, 2010 to December 31, 2011. The increases were due to change in fair value.

Accounting Division, Pennsylvania Municipal Retirement System at P. O. Box 1165, Harrisburg, PA 17108-1165.

### **CONTRIBUTIONS AND INVESTMENT INCOME**

During 2012, contributions from employers and members totaled \$59.3 million compared to \$61.3 million during 2011 and \$61.9 million during 2010. Net investment gain during 2012 was \$187.8 million compared to net investment loss during 2011 of \$29.1 million and gain of \$180.3 million during 2010. Investment gains/losses were primarily attributable to appreciation/depreciation in fair values in the domestic and international equity markets. Investment expenses increased \$0.2 million from \$6.5 million during 2011 to \$6.7 million during 2012 and increased \$0.7 million from \$5.8 million during 2010 to \$6.5 million during 2011. The investment expenses are based on the fair value of the quarterly average balance of investments under management.

### **PENSION PLAN BENEFITS AND EXPENSES**

The primary source of expense during 2012 was for payment of pension benefits totaling \$71.8 million, compared to \$81.2 million during 2011 and \$63.4 million during 2010. Pension benefits decreased by \$9.4 million in 2012 and increased \$17.8 million in 2011 from 2010 primarily due to plan withdrawals in 2012, 2011 and 2010 with total assets of \$18.5 thousand, \$13.4 million, and \$3.8 million respectively. Monthly payments to retirees increased in all three years. Annual annuity payments were \$61.8 million, \$57.3 million and \$51.3 million respectively. Administrative expenses totaled \$3.4 million during 2012, as compared to \$3.14 million during 2011 and \$3.18 million in 2010.

### **FINANCIAL CONTACT**

The System's financial statements are designed to present users with a general overview of the System's finances and to demonstrate the trustee's accountability. If there are questions about the report or additional information is required, contact the Chief,

### Summary of Plan Net Position

as of December 31, 2012, 2011, and 2010

Analysis of Plan Position	2012	2011	2010
<b>Assets</b>	<b>(In Thousands)</b>		
Receivables	\$ 3,537	\$ 4,162	\$ 8,403
Investments	1,663,444	1,489,842	1,536,669
Capital assets	183	160	176
<b>Total assets</b>	<b>1,667,164</b>	<b>1,494,164</b>	<b>1,545,248</b>
<b>Liabilities</b>	<b>5,238</b>	<b>3,995</b>	<b>2,960</b>
<b>Total plan net position</b>	<b>\$1,661,926</b>	<b>\$1,490,169</b>	<b>\$1,542,288</b>

### Summary of Changes in Plan Net Position

for years ended December 31, 2012, 2011, and 2010

Analysis of Plan Position	2012	2011	2010
<b>Additions</b>	<b>(In Thousands)</b>		
Contributions	\$ 59,254	\$ 61,266	\$ 61,930
Net investment gain/(loss)	187,755	(29,087)	180,338
<b>Total additions</b>	<b>247,009</b>	<b>32,179</b>	<b>242,268</b>
<b>Deductions</b>			
Benefit payments and terminations <sup>(1)</sup>	71,828	81,156	63,384
Administrative expenses	3,424	3,142	3,183
<b>Total deductions</b>	<b>75,252</b>	<b>84,298</b>	<b>66,567</b>
<b>Total changes in plan net position</b>	<b>\$171,757</b>	<b>\$(52,119)</b>	<b>\$175,701</b>

### Asset Distribution at Fair Market Value

as of December 31, 2012, 2011, and 2010

Asset Class	2012	%	2011	%	2010	%
	<b>(In Thousands)</b>					
Short term <sup>(2)</sup>	\$ 56,535	3.4%	\$ 33,751	2.3%	\$ 53,231	3.5%
Fixed income	323,324	19.4	298,102	20.0	276,641	18.0
Common preferred stock	652,955	39.3	596,814	40.0	619,971	40.4
International stock	387,223	23.3	328,770	22.1	390,954	25.4
Real estate equity	243,406	14.6	232,406	15.6	195,872	12.7
<b>Total</b>	<b>\$1,663,444</b>	<b>100.0%</b>	<b>\$1,489,843</b>	<b>100.0%</b>	<b>\$1,536,669</b>	<b>100.0%</b>

<sup>(1)</sup> Monthly Annuity Payroll increased by \$4,468,122 for 2012. Average number of annuitants receiving benefits increased by 242 in 2012 (5.7% increase). In 2012, two plans withdrew from the System with total assets of \$15,507, compared to four plans with total assets of \$13,368,163 and three plans with \$3,821,985 total assets that withdrew in 2011 and 2010 respectively.

<sup>(2)</sup> Short term includes cash and equivalents held by investment managers and the Pennsylvania Treasury Department.

## Statements of Plan Net Position

As of December 31, 2012 and 2011

Assets	2012	2011
<b>Receivables</b>		
Plan members	\$ 1,965,386	\$ 1,753,138
Municipal employers	199,195	909,371
Accrued investment income	600,643	1,274,716
Investment sales receivable	771,985	224,586
<b>Total receivables</b>	<b>3,537,209</b>	<b>4,161,811</b>
<b>Investments, at fair value</b>		
Short-term and other investments	56,534,489	33,751,185
U.S. Government fixed income pooled funds	219,892,609	195,524,849
Corporate bond pooled funds	103,431,327	102,576,765
Common and Preferred stocks	652,955,295	596,813,520
Real estate equity	243,406,273	232,406,348
International equities	387,223,332	328,769,556
<b>Total investments</b>	<b>1,663,443,325</b>	<b>1,489,842,223</b>
Capital assets (net of accumulated depreciation of \$191,765 and \$204,391 respectively)	183,318	160,016
<b>Total assets</b>	<b>\$1,667,163,852</b>	<b>\$1,494,164,050</b>
<b>Liabilities</b>		
Accounts payable and accrued expenses	1,852,751	1,754,427
Investment purchases payable	3,384,862	2,240,519
<b>Total liabilities</b>	<b>5,237,613</b>	<b>3,994,946</b>
<b>Net position held in trust For pension benefits</b>	<b>\$1,661,926,239</b>	<b>\$1,490,169,104</b>

The accompanying notes are an integral part of the financial statements.



## Statements of Changes in Plan Net Position

Years Ended December 31, 2012, and 2011

Additions	2012	2011
<b>Contributions</b>		
Plan members	\$ 20,981,612	\$ 20,732,344
Municipal employers	37,974,023	40,231,586
Assessments	298,320	301,571
<b>Total contributions</b>	<b>59,253,955</b>	<b>61,265,501</b>
<b>Investment income/(loss)</b>		
From investing activities:		
Net appreciation/(depreciation) in fair value of investments	173,112,234	(41,712,477)
Short-term and other investments	122,144	106,016
Common and Preferred stocks	9,845,067	8,332,951
Real estate equity	7,419,644	4,887,398
International equities	3,913,027	5,806,869
Less investment expenses	(6,656,863)	(6,507,370)
<b>Total investing activities income/(loss)</b>	<b>187,755,253</b>	<b>(29,086,613)</b>
<b>Total additions</b>	<b>247,009,208</b>	<b>32,178,888</b>
<b>Deductions</b>		
Annuity benefits	63,390,100	63,105,165
Terminations	8,437,610	18,050,718
Administrative expenses	3,424,363	3,142,004
<b>Total deductions</b>	<b>75,252,073</b>	<b>84,297,887</b>
<b>Net increase/(decrease)</b>	<b>171,757,135</b>	<b>(52,118,999)</b>
<b>Net position held in trust for pension benefits</b>		
<b>Balance, beginning of year</b>	<b>1,490,169,104</b>	<b>1,542,288,103</b>
<b>Balance, end of year</b>	<b>\$1,661,926,239</b>	<b>\$1,490,169,104</b>

The accompanying notes are an integral part of the financial statements.

## Notes to Financial Statements

### (1) Organization and Description of the System

#### ORGANIZATION

The Pennsylvania Municipal Retirement System (the System) was created by the Pennsylvania General Assembly in 1974 with the passage of the Pennsylvania Municipal Retirement Law, Act of 1974, P.L. 34, No. 15 (the Act). The System is an agent multiple-employer system, and its designated purpose is to administer sound, cost-effective pensions for local government employees. Responsibility for the organization and administration of the System is vested in the eleven-member Pennsylvania Municipal Retirement Board (the Board). Under the Act, each individual municipality has authority to establish or amend its respective benefits and employee contribution rates subject to Board approval. Employer contributions are actuarially determined by the System's actuary.

Membership in the System is optional for Pennsylvania's local governments. When a municipality joins the System, its full-time employees contractually become members. Part-time, seasonal and temporary employees as well as elected officials may also become members through contractual agreement. As of January 1, 2012, there were 709 municipalities with defined benefit plans and 240 with cash balance plans. The tables (at right) reflect municipal membership and individual membership.

#### PENSION BENEFITS

The System has the broad authority of enabling a municipality to design its own retirement benefit structure. As an alternative, the System has two basic benefit structures: one for municipal employees (Article II of the Act) and one for uniformed employees (police and fire fighters) (Article III of the Act). Certain elected officials are not permitted to become System members, as outlined in individual municipal ordinances. Members are eligible for monthly retirement benefits upon reaching the age of 65 and 55, under Articles II and III, respectively, or upon accumulating 24 years of service. Under Articles II and III of the Act, vesting occurs after 12 years of service.

#### Participating Local Government Employers

	Defined Benefits	Cash Balance
Counties	4	0
Cities	19	0
Boroughs	146	40
Townships of the First Class	18	2
Townships of the Second Class	162	122
Authorities and Other Units	167	63
Police	183	13
Firefighters	10	0
<b>Total*</b>	<b>709</b>	<b>240</b>

\*Total includes plans with no active members.

#### Individual Membership

<b>Active Members</b>	
<b>Defined Benefit Plans</b>	
Municipal	6,943
Police	768
Firefighters	125
<b>Total</b>	<b>7,836</b>
<b>Cash Balance Plans</b>	
Municipal	1,146
Police	12
Firefighters	0
<b>Total</b>	<b>1,158</b>
<b>Total active members</b>	<b>8,994</b>
<b>Retirees and Beneficiaries</b>	
Retirees	3,899
Beneficiaries	495
<b>Total retirees and beneficiaries</b>	<b>4,394</b>
<b>Inactive Participants with Rights to Deferred Pension (Vested)</b>	
Defined benefit	723
Cash balance	229
<b>Total vested</b>	<b>952</b>
Defined benefit	21
Cash balance	0
<b>Total non-vested</b>	<b>21</b>
<b>Total individual memberships</b>	<b>14,361</b>

Such benefits under Articles II and III are generally equal to (a) the actuarial value of the members' contributions and (b) a municipal annuity that is based upon a percentage of a member's salary or compensation.

The benefit structures also provide death, disability, and early retirement benefits. These benefit provisions and all other requirements are established under Articles II and III of the Act.

Under Article IV of the Act, municipalities may provide for benefits different from those available under Articles II and III. Vesting provisions, if any, under Article IV may vary.

Automatic postretirement benefit increases are optional in plan contracts. Some member municipalities include the automatic increase; others occasionally grant an ad hoc cost-of-living (COLA) increase. The most common method of granting a postretirement benefit increase is through the System's excess interest award. (See Note 3 for an explanation of excess interest.)

Member municipalities interested in amending benefits contact the System's staff to discuss desired amendments and to obtain a cost study. Amendments are drafted by the System's staff, reviewed by the Chief Counsel's Office, adopted by the municipality, and submitted to the Board for formal approval.

## (2) Significant Accounting Policies

### BASIS OF ACCOUNTING

The System's financial statements are prepared on the accrual basis of accounting. Employee and employer contributions are recognized in the period in which the contributions are due. Benefits and refunds are recognized when due and payable in accordance with the terms of each plan. Expenses are recorded when the corresponding liabilities are incurred.

### USE OF ESTIMATES IN PREPARING FINANCIAL STATEMENTS

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of additions and deductions during the reported period. Actual results could differ from those estimates.

### INVESTMENTS

Investments are reported at fair value. Fair value is the amount that a plan can reasonably expect to receive for an investment in a current sale between a willing buyer and a willing seller; that is other than in a forced or liquidation sale. Short-term investments are reported at cost, which approximates fair value. Securities traded on a national or international exchange are valued at the last reported sales price at current exchange rates. The fair value of real estate investments are based on independent appraisals every three years. In years for which an appraisal is not performed, real estate investments and investments that do not have an established market value are reported at estimated fair values. Purchases and sales of investments are recorded on a trade-date basis.

### CAPITAL ASSETS

Capital assets, primarily office furniture and equipment, are recorded at cost. Depreciation is provided on the straight-line method over the estimated useful lives of the assets, typically eight years for software and office furniture and equipment.

### FEDERAL INCOME TAXES

The System is a qualified trust fund under Section 401(a) of the Internal Revenue Code (IRC). As a result of the qualified status, the trust fund is entitled to an exemption, under Section 501(a) of the IRC, from federal income taxation on its investment earnings. Additionally, the trust fund and any benefits accruing to the members of PMRS are exempt from Pennsylvania state and municipal taxes.

It should be noted that the Internal Revenue Service (IRS) announced and initiated a renewed focus on the tax qualification of public pension funds in 2008. PMRS continues to work proactively to address this IRS initiative.

### (3) Contributions and Reserves

#### CONTRIBUTIONS

Contributions to the System are made by members and municipalities. Under Articles II and III of the Act, members are required to contribute 3% to 8% of their salary. The amount a member contributes under Article IV of the Act is based upon contracted plan provisions and is principally expressed as a percent of compensation or salary. The contributions required of municipalities are based upon an actuarial valuation, using the Entry Age Normal Actuarial Cost Method, computed as a percentage of the total compensation of all active members during the period for which the amount is determined. The required contributions from municipalities for the years ended December 31, 2012 and 2011 consisted of the following:

	2012	2011
Municipality normal cost	\$38,901,375	\$39,094,578
Amortization of unfunded actuarial accrued liability	(4,838,442)	(5,214,150)
<b>Total<sup>(1)</sup></b>	<b>\$34,062,933</b>	<b>\$33,880,428</b>

Total contributions to the System during 2012 amounted to \$59,253,955 of which \$20,981,612 and \$37,974,023 were made by its members and municipalities, respectively and \$298,320 was from assessments. The actual contributions are 111.5% of the required contributions.

Total contributions to the System during 2011 were \$61,265,501 of which \$20,732,344 and \$40,231,586 were made by its members and municipalities, respectively and \$296,440 was from assessments. The actual contributions are 118.7% of the required contributions.

<sup>1)</sup> Total does not include \$20 per member assessment fee to municipalities.

<sup>2)</sup> Act 44 of 2009 made amendments to Act 205 which changes certain amortization periods. These changes affect the cost calculations for the System's plans as of January 1, 2011.

The difference between the municipalities' required and actual contributions is due to various factors including plan takeovers and the municipalities transferring state aid money to the System as required under the Municipal Pension Plan Funding Standard and Recovery Act of 1984 (Act 205).

Each municipality is also charged a \$20 assessment fee per member to help cover administrative expenses incurred by the System. The remaining costs of administering the plan are financed by investment income.

#### CONTRIBUTIONS REQUIRED AND CONTRIBUTIONS MADE

The System's funding policy requires actuarially determined annual required contributions (ARC) of plan member municipalities at rates that accumulate sufficient assets to pay benefits when due. The System's actuary used the Entry Age Normal Cost Actuarial Method to determine plan liabilities and normal cost. Under this method, a normal cost is calculated that would fund each employee's benefits during the employee's career as a level percent of pay.

At each valuation date, the unfunded actuarial accrued liability is calculated as the present value of all plan benefits, less the present value of future normal cost accruals, less current assets (actuarial value).

The normal cost rate is applied to the projected payroll, and projected employee contributions are deducted. Actuarial gains (or losses) are reflected by decreases (or increases) in the unfunded actuarial accrued liability. Under Act 205, and amended under Act 44 <sup>(2)</sup>, the unfunded accrued liability is amortized as a level dollar amount over the lesser of:

1. a. 30 years with respect to the initial liability as of 1/1/1985 (or first valuation);
- b. 20 years with respect to actuarial gains and losses;
- c. 15 years with respect to changes due to actuarial assumptions;

- d. 20 years with respect to changes due to plan provisions (if state mandated);
  - e. 10 years with respect to changes in benefits for currently active members and one year of retired members (if local benefit changes), or,
2. the average assumed working lifetime of active employees as of the date the liability was established. If there are no active employees, the unfunded liability is amortized one year after the liability was established.

Significant actuarial assumptions used to compute the actuarially determined contribution requirement include (a) a rate of return on the investment of present and future assets of 6.0% per year (net of investment and certain administrative expenses) compounded annually, (b) projected salary increases of 3.0% per year compounded annually for inflation, with an additional age-based component to reflect merit/seniority, (c) postretirement cost-of-living increases of 3.0% per year until the maximum is reached (optional in contracts), and (d) pre- and post-retirement mortality based on the RP2000 Mortality Table for males and females, and an additional set forward of 10 years for disabled lives.

### RESERVE DESCRIPTIONS

The Act defines the following funds to be maintained by the System:

#### Members' Reserve Account

The Members' Reserve Account is credited with all contributions made by active members of the System. Interest is added to each member's individual account at an annual rate determined by the Board. The System's current regular interest rate is 6.0%.

Upon retirement or disability of an active member, the member's accumulated contributions plus interest are transferred to the Retired Members' Reserve Account for subsequent benefit payments. Withdrawals of the contributions of members not eligible for benefits are paid from this reserve.

As of December 31, 2012 and 2011, the balance in the Members' Reserve Account was \$418,163,830 and \$407,199,633, respectively. The account is fully funded.

#### Municipal Accounts

Separate municipal accounts are maintained for each municipality. The Municipal Reserve Account is credited with each municipality's contributions toward the superannuation retirement and death benefits of its members. Annual interest is added to each separate municipal account at the current regular interest rate of 6.0%.

As of December 31, 2012 and 2011, the balance in the Municipal Reserve Account was \$767,942,906 and \$745,384,988, respectively. The account is fully funded.

#### Retired Members' Reserve Account

The Retired Members' Reserve Account represents the amounts transferred from the Members' Reserve Account, the Municipal Accounts, and the Disability Reserve Account. All retirement benefits and retirees' death benefits are paid from this reserve. Annual interest is credited to the Retired Members' Account at the current regular interest rate of 6.0%.

As of December 31, 2012 and 2011, the balance in the Retired Members' Reserve Account was \$696,826,051 and \$637,170,767, respectively. The account is fully funded.

#### DROP Participant Reserve Account

Deferred Retirement Option Program ("DROP") is an optional form of payment upon a member's retirement. The DROP Participant Reserve Account is credited with all monthly annuity payments payable to a DROP Participant. The monthly DROP interest is dependent on the monthly rate of return credited to the Liquid Asset Pool as determined by the Treasurer. The DROP Interest credited each month shall not be less than zero percent (0.0%) nor more than 0.367 percent (0.367%) per month, and shall not exceed the statutory limit of four and five tenths percent (4.5%) annually. The interest rates for 2012 were .23% for July through October, .22% for November and .21% for December. The first DROP Participant enrolled on July 31, 2012.



As of December 31, 2012, the balance in the DROP Participant Reserve Account was \$125,412. The account is fully funded.

### **Disability Reserve Account**

The Disability Reserve Account is credited with the contributions made by municipalities toward the disability retirement of member employees. The disability reserves are limited to 150% of the largest value of transfers to the Retired Members' Reserve Account over the most recent three years.

As of December 31, 2012 and 2011, the balance in the Disability Reserve Account was \$519,422 and \$211,577 respectively. The account is fully funded.

### **Undistributed Earnings Designation Account**

In addition to regular interest, the System may also award excess interest. Excess interest is investment earnings on the System's assets in excess of that required for allocation to regular interest and administrative expenses. Rates for excess interest are determined annually by the Board with advice from the System's actuary. The excess interest is distributed to the member accounts, the municipal accounts, and the retiree accounts as directed by the municipality.

The System did not distribute excess interest in 2012 or 2011. Such calculation would have been prepared in accordance with a Board approved formula and would have been based on the actuarial value (fair value) of the Systems assets as of December 31, 2011 and 2010, respectively, and the expected cash flows of the System for 2012 and 2011 if excess interest had been distributed.

As of December 31, 2012 and 2011, the Undistributed Earnings Designation Account had a balance of \$(221,651,382) and \$(299,797,860), respectively. While this balance is of concern, historical data argues that the markets' reversion to the mean will resolve the shortfall. The long term outlook of the System remains positive.

## **(4) Investments**

Members of the Board are trustees of the System's assets. They have exclusive responsibility for the management of such assets and have full power to invest the System's assets, subject to the terms, conditions, limitations, and restrictions imposed by Commonwealth law upon fiduciaries.

The Board has authorized investments in U.S. Government and agency securities, foreign government bonds denominated in U.S. dollars and rated "AA," corporate bonds rated "A" or better, equity securities, direct real estate, and real estate commingled funds allowing for equity participation. The Board specifically prohibits investments in commodities, mineral rights, and options. Additionally, short-selling and margin purchase transactions are prohibited.

The Board achieves day-to-day management of the investment portfolio through the use of investment managers. Restrictions concerning diversification within each manager and among managers are provided by the adopted Investment Policy.

The System invests in the Commonwealth of Pennsylvania Treasury Department's short-term cash management fund. The fund comprises various short-term investments, including repurchase agreements. Restrictions on these repurchase agreements are outlined below.

Repurchase agreements are allowable if (a) collateralized by United States Government Obligations deemed acceptable by the Treasury Department prior to the transaction; (b) the market value of collateral equals at least 102% of the principal and accrued interest; and (c) the collateral is delivered to the Treasury's bank account. For tri-party agreements, collateral shall be delivered to the Treasury's account with an independent third party sub-custodian (either a money center bank or a nationally recognized non-bank financial institution).



**CUSTODIAL CREDIT RISK**

The System's exposure to the risk of loss of investments due to errors and omissions on behalf of its advisors is covered by the contractual obligation for the advisors to maintain errors and omissions insurance. The investment managers also must provide proof of a fidelity bond covering the advisor, the office, and its employees.

In accordance with a contract between the Treasurer of the Commonwealth of Pennsylvania and the Treasurer's custodial agent, the System may participate in a securities lending program. Under this program, the custodial agent, acting as the lending agent, lends securities (equities, fixed income, and money market instruments) to independent brokers and dealers in exchange for collateral in amounts up to 105% of the fair value of securities lent. Collateral is marked-to-market daily. If the fair value of the collateral held falls below the minimum guidelines for securities lent, additional collateral is obtained. In lieu of securities or cash, the borrower may deliver to the lending agent irrevocable bank letters of credit, government securities, or repurchase agreements as collateral. If the collateral obtained consists in whole or in part of cash, the lending agent may use or invest the cash in accordance with reinvestment guidelines approved by the State Treasurer.

All securities loans can be terminated on demand by either the System or the borrower. Cash collateral is invested in the lending agent's short-term investment pool. The relationship between the maturities of the investment pool and the System's loans is affected by the maturities of the securities loans made by other entities that use the lending agent's pool, which the System cannot determine. The System cannot pledge or sell collateral securities received unless the borrower defaults.

As of December 31, 2012, the System had no credit risk exposure to borrowers because participation in the program was temporarily halted in 2008.

**CREDIT RISK CONCENTRATION**

Investments (other than those issued or guaranteed by the U.S. Government) in any one organization that represented 5% or more of the plan's net assets at December 31, 2012 and 2011 were:

**Credit Risk Concentration**

Security	Fair Value
<b>2012</b>	
TIAA-CREF	109,080,000
<b>2011</b>	
TIAA-CREF	104,200,000

**INTEREST RATE RISK**

The risk is that changes in interest rates will adversely affect the fair value of a fixed income investment. The System had no actively managed long-term fixed income investments. The System has not adopted a formal policy but as a means for limiting the System's exposure to fair value losses arising from rising interest rates, invests in an Aggregate Bond Index Fund. The fixed-income portfolio consists of the following:

**2012 Interest Rate Risk**

Security	Quality Rating*	Modified-Adjusted Duration	Fair Value
U.S. Aggregate Bond index	AAA	5.1	\$ 219,892,609
U.S. Aggregate Bond index	AA	5.1	\$ 103,431,327
State Treasury STIF	NR	0.1	\$ 23,516,516

**2011 Interest Rate Risk**

Security	Quality Rating*	Modified-Adjusted Duration	Fair Value
U.S. Aggregate Bond index	AAA	4.9	\$195,524,849
U.S. Aggregate Bond index	AA	4.9	\$ 102,576,765
State Treasury STIF	NR	0.1	\$ 28,867,510

\* Index is not rated as a security but the average rating of the securities held in the index is AA2

**FOREIGN CURRENCY RISK**

The risk is that changes in exchange rates will adversely affect the fair value of an investment. As part of the System's program to manage risk and enhance returns, the System invests in global markets. The System has not adopted a formal policy for foreign currency risk but allows the contracted external managers to decide what action to take regarding their respective portfolios' foreign currency exposures. At December 31, the System had the following non-U.S. currency exposure:

**2012 Foreign Currency Risk**

Currency	Equity	Short-Term	Total
Euro Currency Unit	\$41,277,030	\$54,881	\$41,331,911
British Pound Sterling	31,739,868	37,951	31,777,819
Swiss Franc	20,678,165	0	20,678,165
Japanese Yen	10,619,886	0	10,619,886
Hong Kong Dollar	7,712,461	0	7,712,461
Canadian Dollar	6,066,784	10,990	6,077,774
Swedish Krona	4,974,938	0	4,974,938
Australian Dollar	3,763,132	0	3,763,132
Singapore Dollar	2,910,733	0	2,910,733
New Turkish Lira	1,493,584	0	1,493,584

**2011 Foreign Currency Risk**

Currency	Equity	Short-Term	Total
Euro Currency Unit	\$44,266,282	\$75,202	\$44,341,484
Japanese Yen	28,706,986	3,978	28,710,964
British Pound Sterling	21,929,749	189,005	22,118,754
Swiss Franc	19,273,924	239,683	19,513,607
Hong Kong Dollar	5,808,185	75,250	5,883,435
Canadian Dollar	9,324,911	11,874	9,336,785
Australian Dollar	7,215,693	9,177	7,224,870
South Korean Won	4,918,443	0	4,918,443
Singapore Dollar	2,991,862	56,181	3,048,043
Thailand Baht	3,691,521	0	3,691,521
Norwegian Krone	2,719,915	614	2,720,529
Swedish Krona	1,112,600	95,952	1,208,552
Israeli Shekel	449,279	70,588	519,867
Danish Krone	890,269	5,334	895,603

**(5) Securities Lending**

Under the securities lending program, the lending agent provides indemnification to the Commonwealth if the borrowers fail to return the underlying securities (and the collateral is inadequate to replace the securities lent) or fail to pay income distributions on them. As of December 31, 2012, 2011 and 2010, the System had no securities out for loan because of a continued Board policy prohibiting participation in securities lending. The System had no cash collateral invested in the custodial agent's short-term collateral investment pool as of December 31, 2012, 2011 and 2010.

**(6) Pension Plan for Employees of the System**

The System contributes to the Commonwealth's State Employees' Retirement System (SERS), a cost sharing multiple-employer defined benefit pension plan. SERS provides retirement, death, and disability benefits to plan members and beneficiaries according to Commonwealth statute. SERS issues a publicly available financial report that can be obtained by writing SERS, 30 N. Third Street, P.O. Box 1147, Harrisburg, Pennsylvania 17108-1147.

The contribution requirements of plan members and the System are mandated by Commonwealth statute. Most SERS plan members are required to contribute 5% or 6.25% of the annual covered payroll depending upon service class. The System is required to contribute at an actuarially determined rate. The rates applied to annual covered payroll were 10.51% at July 1, 2012, 6.69% at July 1, 2011, and 4.11% at July 1, 2010. The System's annual contributions to SERS for the years ending December 31, 2012, 2011 and 2010 were \$114,942, \$74,926 and \$47,136, respectively, which were equal to the required contributions each year.

## (7) Relationships with Other Commonwealth Agencies

Responsibility for the organization and administration of the System is vested in the eleven-member Pennsylvania Municipal Retirement Board. The State Treasurer and the Secretary of the Commonwealth serve on the Board by virtue of statute. Eight Board members are also appointed by the Governor after being nominated by their respective organizations.

One member each represents the Pennsylvania League of Cities, Pennsylvania Municipal Authorities Association, Pennsylvania State Association of Boroughs, Pennsylvania State Association of County Commissioners, Pennsylvania State Association of Township Commissioners, Pennsylvania State Association of Township Supervisors, the active police officers, and the active firefighters. In addition, one Board position is filled by a retired member of the System. Interested individuals submit an application, and then the Governor appoints someone from the list of applicants.

The System is not included as a component unit of the Commonwealth of Pennsylvania for financial reporting purposes because the System is not financially accountable to the Commonwealth as there is no imposition of will, no financial benefit/burden, nor fiscal dependency associated with the System toward the Commonwealth.

## (8) Plan Termination

Member municipalities may withdraw from the System if the conditions for withdrawal under the Act have been met. Requirements include a minimum of five years of membership, approval of a minimum of 75% of the plan's active, vested and retired members and approval of the Board. In the event of withdrawal, a municipality is entitled to receive a net refund of the amount then standing to the credit of the municipality in the municipal account, the member employees' account, and the retired members' reserve account. In no event shall the municipality refund

exceed the pro-rata interest of the withdrawing municipality in the net assets of the entire fund based on market value of the fund investments as of the date of receipt of the application for permission to withdraw. Liability for any continuation of retirement or disability benefits being paid from the System shall attach to the withdrawing municipality.

## (9) Risk Management

Exposure of the System through Board or staff activity is covered by various means. The System acts under the cover of sovereign immunity, participation in the Employee Liability Self-Insurance Program of the Commonwealth of Pennsylvania, the Commonwealth's fidelity bond, and the State Insurance Fund. The Board also adopted a self-insurance indemnification policy in 2004. There have been no significant reductions in insurance coverage from the prior year. Settlements did not exceed insurance coverage for the past three fiscal years.

## (10) Commitments and Contingencies

The System leases office facilities under an operating lease that expires November 2016 with an option to extend for five years. Future minimum lease payments under this lease are \$111,000 per year.

Total rental expenses for the years ended December 31, 2012 and 2011 were \$110,968 and \$109,093, respectively.

## **(11) Additional Plan Disclosures as Mandated by GASB 50**

### **(a) Plan Description**

The Pennsylvania Municipal Retirement System (the System) was created by the Pennsylvania General Assembly in 1974 with the passage of the Pennsylvania Municipal Retirement Law, Act of 1974, P.L. 34, No. 15 (the Act). The System is an agent multiple-employer system, and its designated purpose is to administer sound, cost-effective pensions for local government employees. Responsibility for the organization and administration of the System is vested in the eleven-member Pennsylvania Municipal Retirement Board (the Board). Under the Act, each individual municipality has authority to establish or amend its respective benefits and employee contribution rates subject to Board approval. Employer contributions are actuarially determined by the System's actuary. The System issues a publicly available financial report that includes financial statements and required supplementary information.

The System's investments are reported at fair value as discussed in Note 2, Summary of Significant Accounting Policies. The annual required contribution (ARC) is actuarially determined. The System's actuary used the Entry Age Normal Cost Actuarial Method to determine plan liabilities and normal cost. Under this method, a normal cost is calculated that would fund each employee's benefits during the employee's career as a level percent of pay.

### **(b) Funding Status and Funding Progress**

As of January 1, 2012, the most recent actuarial valuation date, the plan was 103.8% funded. The actuarial accrued liability for benefits was \$1,727,217,269 and the actuarial value of assets was \$1,792,809,433 resulting in an unfunded actuarial accrued liability (UAAL) of (\$65,592,164). The covered payroll (annual payroll of active employees covered by the plan) was \$366,882,467, and the ratio of the UAAL to the covered payroll was (17.9%) percent.

The schedule of funding progress, presented in the actuarial section, following the notes to the financial statements, presents multiyear trend information about whether the actuarial value of plan assets are increasing or decreasing over time relative to the actuarial accrued liability for benefits.

### **(c) Actuarial Methods and Assumptions**

In the January 1, 2012 actuarial valuation, the Entry Age Normal Actuarial Cost Method, computed as a percentage of the total compensation of all active members during the period for which the amount is determined was used. The actuarial assumptions included (a) 6.0% investment rate of return, and (b) projected salary increases ranging from 3.0 to 7.8% with an average increase of 5.0%, including a 3.0% rate of inflation. The assumptions did not include a cost-of-living adjustment. The amortization method uses level dollar for plan bases and open for Aggregate Gain/Loss based on an open amortization period. The remaining amortization period at December 31, 2012 was 10-30 years.

The single amortization period is determined individually for each of our participating plans. The weighted average of the separate amortization periods is 11.13 years for the unfunded municipalities. This amount was determined by taking the sum of the individual amortization periods multiplied by the unfunded liabilities for each underfunded municipality and dividing by the sum of the unfunded liability for all of the underfunded municipalities.

## **(12) Risk and Uncertainties**

Investments are exposed to various risks such as interest rate, market, and credit risks. Due to the level of risk associated with certain investments, it is possible that changes in the values of investment securities may occur in the near term and such changes could materially affect the amounts reported in the financial statements.

## Required Supplemental Information

### Schedule 1

Schedule of Funding Progress <sup>(1)</sup>

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) - Entry Age (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a)/c)
1/1/2012	\$1,792,809,433	\$1,727,217,269	\$(65,592,164)	103.8%	\$366,882,467	(17.9)%
1/1/2011	1,713,751,974	1,673,904,145	(39,847,829)	102.4	383,802,844	(10.4)
1/1/2010	1,620,150,779	1,560,357,536	(59,793,243)	103.8	377,960,930	(15.8)
1/1/2009	1,540,152,742	1,451,637,264	(88,515,478)	106.1	372,370,037	(23.8)
1/1/2008	1,458,148,442	1,377,201,000	(80,947,442)	105.9	364,865,185	(22.2)
1/1/2007	1,336,009,295	1,282,021,998	(53,987,297)	104.2	358,690,830	(15.1)

See accompanying Actuarial Methods and Significant Assumptions.

### Schedule 2

Schedule of Required Employer Contributions for Last Six Years

Year Ended December 31	Annual Required Contributions (ARC) <sup>(2)</sup>	Actual Employer Contribution	Percentage Contributed <sup>(3)</sup>
2012	\$34,062,933	\$37,974,023	112%
2011	33,880,428	40,231,586	119
2010	31,561,925	40,949,360	130
2009	30,631,316	35,309,446	115
2008	29,300,378	31,532,859	108
2007	27,118,435	29,059,248	107

See accompanying Actuarial Methods and Significant Assumptions.

<sup>(1)</sup> The System has historically chosen to have actuarial valuations performed bi-annually for purposes of calculating the actuarial accrued liability as allowed by GASB Statement 25. Under Act 293, County plans are required to redetermine contributions levels bi-annually on even years. All other plans are required to redetermine contribution levels bi-annually on odd years under Act 205. The prior years' liabilities were actuarially adjusted and included to maintain a valuation of the System from year to year. The above information was derived from the following membership data, as provided by the System, regarding:

- Four county defined benefit plans required to redetermine contribution levels as of January 1, 2012;
- 707 defined benefit non-county plans and 229 cash balance plans as of January 1, 2011;
- Five county defined benefit plans required to redetermine contribution levels as of January 1, 2010;
- 696 defined benefit non-county plans and 203 cash balance plans as of January 1, 2009;
- Four county defined benefit plans required to redetermine contribution levels as of January 1, 2008;
- 679 defined benefit non-county plans and 177 cash balance plans as of January 1, 2007.

<sup>(2)</sup> The Annual Required Contribution is calculated using the actuary's determined Normal Cost percentage for each plan and the employers' anticipated payroll for each participating plan. It also may include the amortization payment calculated by the actuary or the over-funding credit required under Pennsylvania State Law, Act 205 of 1984. The composite figure is assembled by the Agency's staff.

<sup>(3)</sup> The difference between the municipalities' required contributions and the percentage contributed is due to various factors including plan takeovers and the municipalities transferring state aid money to the System as required under the Municipal Pension Plan Funding Standard and Recovery Act of 1984 (Act 205).

## Actuarial Methods and Significant Assumptions

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at the date indicated. Additional information as of the latest actuarial valuation follows:

Valuation date	January 1, 2012
Actuarial cost method	Entry age normal
Amortization method	Level dollar for plan bases and open for aggregate gain/(loss) based on an open amortization period
Remaining amortization period	<ul style="list-style-type: none"> <li>- 30 years with respect to the initial liability as of 1/1/1985 (or first valuation);</li> <li>- 20 years with respect to actuarial gains and losses;</li> <li>- 15 years with respect to changes due to actuarial assumptions;</li> <li>- 20 years with respect to changes due to plan provisions (if state mandated);</li> <li>- 10 years with respect to changes in benefits for currently active members and one year of retired members (if local benefit changes).</li> </ul>
Asset valuation method	Sum of all audited reserve accounts plus any additional investment income to be distributed as excess interest
<b>ACTUARIAL ASSUMPTIONS</b>	
Investment rate of return	6.0% compounded annually (net of investment and certain administration expenses)
Projected salary increases	3.0% inflation and age-related scale for merit/seniority (eg., age 30 - 6.4%; age 40 - 5.0%; age 50 - 4.1%; age 60 - 3.7%. 2.0% is added for each of the first three years of service)
Inflation at	3.0%
Post-retirement cost-of-living adjustments	3.0% per annum until maximum is reached (optional in contracts)



## Supplemental Schedules

Years Ended December 31, 2012, and 2011

### Schedule 3 - Administrative Expenses

Comparative Two-Year Schedule  
Years Ended December 31, 2012, and 2011

	2012	2011
<b>PERSONNEL COSTS</b>		
Salaries and wages	\$1,416,033	\$1,323,532
Social security contributions	105,808	100,088
Retirement contributions	114,942	74,926
Insurance contributions	517,395	416,726
Other employee benefits	5,757	2,130
<b>Total personnel costs</b>	<b>2,159,935</b>	<b>1,917,402</b>
<b>PROFESSIONAL COSTS</b>		
Investment Consultant	175,000	175,000
Actuarial	234,930	241,293
Data processing	14,614	13,515
Divestiture Consultant	13,750	27,500
Audit	102,500	99,700
IT Consultants	69,576	0
Legal	159,398	169,577
Proxy Voting Services	16,045	16,241
Miscellaneous professional	52,118	49,630
<b>Total professional costs</b>	<b>837,931</b>	<b>792,456</b>
<b>COMMUNICATION COSTS</b>		
Printing	6,925	4,836
Telephone	40,838	37,632
Postage	69,448	37,623
Travel	16,300	14,994
Advertising	5,188	5,145
<b>Total communication costs</b>	<b>138,699</b>	<b>100,230</b>
<b>OTHER SERVICES AND CHARGES</b>		
Contracted EDP services	84,170	114,316
Office space rental	110,968	109,093
Equipment leasing	15,359	17,071
Supplies	25,583	21,241
Maintenance	5,433	16,348
Bonding and insurance	997	1,342
Dues and subscriptions	2,665	2,469
<b>Total other services and charges</b>	<b>245,175</b>	<b>281,880</b>
<b>DEPRECIATION</b>		
	<b>42,623</b>	<b>50,037</b>
<b>Total administrative expenses</b>	<b>\$3,424,363</b>	<b>\$3,142,005</b>

### Schedule 4 - Investment Expenses

Comparative Two-Year Schedule  
Years Ended December 31, 2012, and 2011

	2012	2011
Investment management fees	\$6,645,508	\$6,496,511
Custodial fees	11,355	10,859
<b>Total investment expenses</b>	<b>\$6,656,863</b>	<b>\$6,507,370</b>

### Schedule 5 - Payments to Consultants

Comparative Two-Year Schedule  
Years Ended December 31, 2012, and 2011

Firm Name	Nature of Service	2012	2011
Cheiron	Actuary	\$234,930	\$241,293
CliftonLarsonAllen, LLP	Auditor	102,500	99,700
Dahab Associates, Inc.	Investment Consultant	175,000	175,000
ISS	Proxy Voting Services	16,045	16,241
IW Financial	Divestiture Consultant	13,750	27,500
<b>Total</b>		<b>\$542,225</b>	<b>\$559,734</b>



**This Page Intentionally Left Blank**



**TODAY**

**TOMORROW**

**YESTERDAY**

**"We are made wise not by the recollection of our past, but by the responsibility for our future."**

**~George Bernard Shaw**

**INVESTMENTS**

## Basis of Presentation

The Investment Section was prepared under the supervision of James B. Allen, Secretary of PMRS. The data presented in the Investment Section by the System's independent investment consultant has been prepared by using a time-weighted rate of return methodology based upon market values. The Investment Section includes only those investments under management of advisors which are under contract with the System. These investments are valued in a manner consistent with information present in the Financial Section with the exception of the recognition of unallocated cash, pending sales and purchases and cash held by real estate managers. The difference noted above represents the difference between the investment balance of \$1,663,443,325 presented in the Financial Section and the balance of \$1,657,283,689 reported in this section.

Investments are reported at fair value. Short-term investments are reported at cost, which approximates fair value. Securities traded on a national or international exchange are valued at the last reported sales price at current exchange rates. Mortgage-backed securities are valued on the basis of future principal and interest payments and are discounted at prevailing interest rates for similar instruments. The fair value of real estate investments is based on independent appraisals every three years. In years for which an appraisal is not performed, real estate investments and investments that do not have an established market value are reported at estimated fair values. Purchases and sales of investments are recorded on a trade-date basis.

Returns for actively-managed funds presented throughout the Investment Section are gross of external manager fees; returns for passively managed funds are net of external manager fees. Overdraft charges, debit interest, registration expenses and stamp duties and taxes spent on foreign securities are deducted and are not included in the calculation of returns.

In addition, the securities lending money market returns are net of custodial fees, transfer agent expenses and professional fees.

### INVESTMENT RETURN<sup>(1)</sup>

On December 31st, 2012 the Pennsylvania Municipal Retirement Board's investment portfolio was valued at \$1,657,283,689<sup>(2)</sup> which was an increase of \$179,308,899 from the December 2011 ending valuation of \$1,477,974,790. During the calendar year of 2012, the System recorded aggregate net withdrawals of \$19,385,971 and a net investment return of \$193,811,580.

For the period between December 31, 2007 and December 31, 2012, the System recorded net withdrawals of \$89,487,760 and a net investment return of \$186,929,456. During that period the System has increased from \$1,559,842,000 to \$1,657,283,689. If the fund had earned an annualized compound rate of 6.0% during that period, it would have been worth \$1,985,553,802 or \$328,270,113 more than the actual value for the year.

<sup>(1)</sup> The System's investment assets reported in the Investment Section are presented on the same basis of accounting as described in Note 1 of the Notes to Financial Statements with the following exceptions: The Investment Section includes those investments under management of advisors which are under contract by the agency and does not include pending sales and purchases. The investment consultant, Dahab Associates, oversees these investments. In addition, PMRS maintains a pool for certain short-term funds that is used to fund administrative and benefits payments.

<sup>(2)</sup> Amounts in the Investment Section do not include cash held by the real estate managers.

### RELATIVE PERFORMANCE

#### Total Fund

The time-weighted rate of return for the System's investments during the fiscal year ended December 31, 2012 was 13.2%, ranking in the 45th percentile of the Public Fund universe. This performance level was 0.2% above the median fund's return of 13.0%. The cumulative five-year return for December 2007 through December 2012 was 2.5% on an annualized basis and ranked in the 74th percentile. For comparison the median fund's return was 3.1%.

#### Large Cap Equities

Over the trailing twelve months, the large cap equity portfolio returned 16.4%, which was 0.4% more than the comparative benchmark S&P 500 Index's 16.0% performance and ranked in the 44th percentile. For the last five years, this component returned 1.5% per annum and ranked in the 65th percentile. The S&P 500 returned an annualized 1.6% during the same time frame.

#### Small Cap Equities

This component returned 16.1%, which was 0.2% less than the comparative benchmark Russell 2000 Index's 16.3% performance, ranking in the 56th percentile for the trailing twelve months. For the five year period, this component returned 3.6% annualized and ranked in the 68th percentile. For comparison, the Russell 2000 returned an annualized 3.6% over the same period.

#### Developed International Equities

This segment's return was 22.8% over the trailing year, which was 4.0% more than the comparative benchmark S&P BMI Developed Ex-US Index's 18.8% return, ranking in the 25th percentile. For the five-year period, this component returned -1.9% on an annualized basis and ranked in the 61st percentile. For comparison, the S&P BMI Developed Ex-US Index returned an annualized -2.3% during the same time frame.

#### Emerging Markets Equities

Over the trailing year, the emerging markets equity portfolio returned 18.9%, 0.1% above the comparative benchmark S&P BMI Emerging Market Index's 18.8% return, ranking in the 60th percentile. PMRS entered the Emerging Market Equities during October and November 2008. There is no performance information for the trailing five years.

#### Fixed Income

Over the trailing year, this component returned 4.3%; that return was 0.1% above the comparative benchmark Barclays Aggregate Index's 4.2% return, ranking in the 90th percentile. For the five-year period, this component returned 6.0% annualized and ranked in the 80th percentile. For comparison, the Barclays Aggregate Index also returned an annualized 6.0% over the same period.

#### Real Estate

Over the trailing twelve-month period, this segment returned 8.5%, which was 2.0% below the comparative benchmark NCREIF Property Index's 10.5% performance. For the cumulative five-year period, this component returned -1.0% per annum, while the NCREIF Property Index returned an annualized 2.1% over the same time frame.

The table on page 41 compares rates of return for the System's total investment portfolio with standard indexes for the last year, three years, five years and ten years.

### Asset Allocation

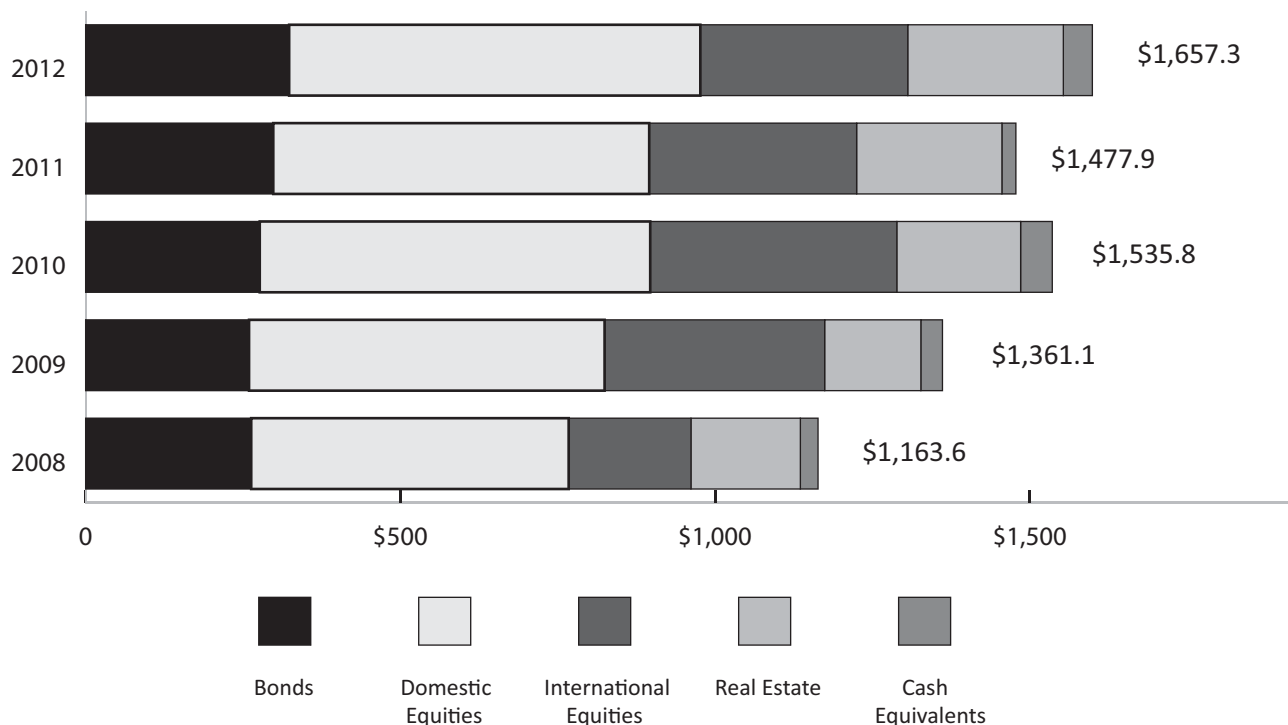
The table to the right shows the allocation of assets as of December 31, 2012.

\* Numbers may not add due to rounding.

The following graph shows the System's five-year trend of investments at fair value.

Asset Allocation (as of 12/31/2012)		
Type	%	Amount
Large cap equities	24.9%	\$412,833,306
Small cap equities	14.5%	\$240,477,859
Int'l developed mkts	13.7%	\$227,054,975
Int'l emerging mkts	9.7%	\$160,302,093
<b>Total equities</b>	<b>62.8%</b>	<b>\$1,040,668,233</b>
Fixed income	19.5%	\$323,323,936
Real estate	14.9%	\$247,158,073
Cash and equivalents <sup>(1)</sup>	2.8%	\$46,133,447
<b>Total portfolio</b>	<b>100.0%</b>	<b>\$1,657,283,689</b>

**Portfolio Distribution - Five-Year Trend <sup>(2)</sup>**  
(Fair Value - Amounts in Millions)



<sup>(1)</sup> Cash and equivalents includes funds held by the Pennsylvania Treasury Department.

<sup>(2)</sup> Amounts in the Investment Section do not include cash held by real estate managers.

**Portfolio Rates of Return <sup>(1)</sup>**

Last 10 Years as of December 31, 2012

The following table compares rates of return for the System's total investment portfolio with standard indexes for the last one, three, five and ten years. The calculations of yields were prepared using a time weighted rate of return based on the market rate. The System's returns have been competitive with other professionally managed funds.

<b>PERFORMANCE SUMMARY</b>				
	1 Year	3 Year	5 Year	10 Year
<b>Total Portfolio</b>	<b>13.2%</b>	<b>8.2%</b>	<b>2.5%</b>	<b>7.7%</b>
Public Fund Rank <sup>(2)</sup>	(45)	(67)	(74)	(25)
Shadow Index <sup>(3)</sup>	13.2	8.6	2.8	7.7
<b>Large Cap Equity</b>	<b>16.4</b>	<b>10.9</b>	<b>1.5</b>	<b>7.7</b>
Large Cap Rank <sup>(4)</sup>	(44)	(46)	(65)	(57)
S&P 500	16.0	10.8	1.6	7.1
<b>Small Cap Equities</b>	<b>16.1</b>	<b>13.1</b>	<b>3.6</b>	<b>9.4</b>
Small Cap Rank <sup>(4)</sup>	(56)	(58)	(68)	(87)
Russell 2000	16.3	12.2	3.6	9.7
<b>International Equity</b>	<b>22.8</b>	<b>5.2</b>	<b>-1.9</b>	<b>9.6</b>
International Equity Rank <sup>(5)</sup>	(25)	(60)	(61)	(70)
S&P BMI Ex-US	18.8	5.2	-2.3	9.9
<b>Emerging Markets Equity</b>	<b>18.9</b>	<b>4.6</b>		
Emerging Markets Rank <sup>(6)</sup>	(60)	(62)	---	---
S&P BMI EMGM	18.8	4.2	-0.6	17.4
<b>Real Estate</b>	<b>8.5</b>	<b>8.3</b>	<b>-1.0</b>	<b>6.7</b>
NCREIF	10.5	12.6	2.1	8.4
<b>Fixed Income</b>	<b>4.3</b>	<b>6.2</b>	<b>6.0</b>	<b>5.1</b>
Core Fixed Income Rank <sup>(7)</sup>	(90)	(88)	(80)	(89)
Barclays AGG	4.2	6.2	6.0	5.2

Report prepared by DAHAB ASSOCIATES, INC.

<sup>(1)</sup> Rate of return is a mathematical measure of the rate of change in the asset value of a fund. All rates of return are based on the fair value of the assets. Rates of return reflect both realized and unrealized capital gains and losses as well as total earnings from interest and dividends received.

<sup>(2)</sup> Ranked against balanced funds.

<sup>(3)</sup> The shadow index is a customized index created by the System's investment consultant. It is constructed at the asset class level with corresponding benchmark allocations matching the portfolio on a quarterly basis. The following asset classes and corresponding benchmarks have been utilized: Large Cap Equity -- S&P 500; Fixed Income -- Barclays Aggregate Index; Cash & Equivalent -- 90-Day T Bills; Real Estate -- NCREIF Property Index; International Equity -- S&P Citigroup BMI Ex-US Index; Small Cap Equity -- Russell 2000; Emerging Market -- MSCI Emerging Markets. Ranked against equity oriented funds.

<sup>(4)</sup> Ranked against equity oriented funds.

<sup>(5)</sup> Ranked against international developed markets oriented funds.

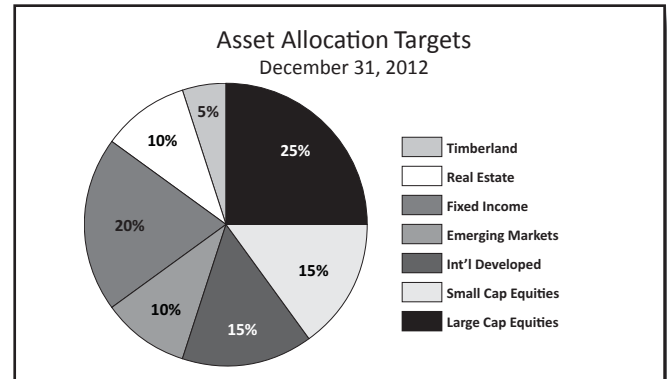
<sup>(6)</sup> Ranked against international emerging markets oriented funds. PMRS entered emerging markets equities late 2008.

<sup>(7)</sup> Ranked against fixed income oriented funds.

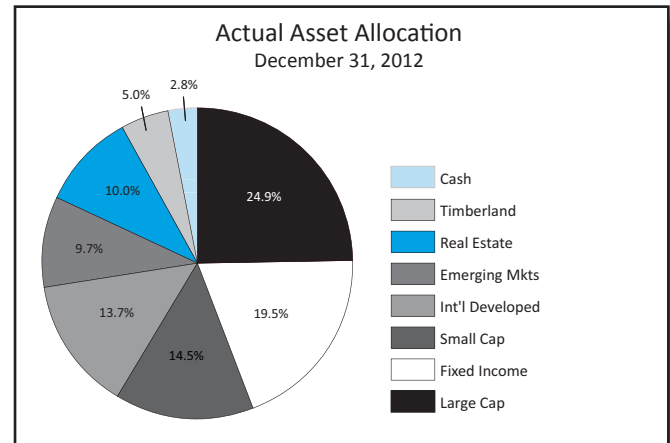
## Asset Allocation

On January 21, 2010, the Board adopted Policy Statement 10 - 1 Investment Guidelines which established its allocation goals as follows:

Equities (large capitalized firms)	25%
Equities (small capitalized firms)	15%
Equities (international developed markets)	15%
Equities (emerging markets)	10%
Fixed Income	20%
Real Estate	10%
Timberland	5%



The System's asset allocation as of December 31, 2012, was \$653.3 million committed to domestic equities (\$412.8 large cap and \$240.5 small cap), \$387.4 million to international equities (\$227.1 international developed and \$160.3 emerging markets), \$323.3 million to bonds, \$247.2 million to real estate (includes timberland \$70.0), and \$46.1 million to cash equivalents. The percentage distribution is illustrated below.



## Asset Allocation December 31, 2012

Sector	Target Allocation	Target Dollar	Current Allocation	Current Dollar Allocation	Variance/Dollar	Variance/Percent
Fixed Income	20%	\$331,456,738	19.5%	\$323,323,936	\$(8,132,802)	-0.49%
Large Cap	25%	414,320,922	24.9%	412,833,306	(1,487,616)	-0.09%
Small Cap	15%	248,592,553	14.5%	240,477,859	(8,114,694)	-0.49%
Int'l Developed	15%	248,592,553	13.7%	227,054,975	(21,537,578)	-1.30%
Emerging Mkts	10%	165,728,369	9.7%	160,302,093	(5,426,276)	-0.33%
Real Estate	10%	165,728,369	10.7%	177,148,908	11,420,539	0.69%
Timber	5%	82,864,184	4.2%	70,009,165	(12,855,019)	-0.78%
Cash	0.0%	0	2.8%	46,133,447	46,133,447	2.78%
<b>TOTAL</b>	<b>100%</b>	<b>\$1,657,283,689</b>	<b>100%</b>	<b>\$1,657,283,689</b>	<b>0</b>	<b>0</b>



## Summary of Investment Expenses

Comparative Two-Year Schedule  
Years ended December 31, 2012 and 2011

Firm Name	2012	2011
<b>Large Cap Domestic Managers</b>		
Chase Investment Counsel <sup>(1)</sup>	\$ 0	\$ 327,057
DePrince, Race & Zollo	329,895	307,326
LSV Asset Management	539,948	513,136
Polen Capital Management	501,078	439,363
UBS Asset Management <sup>(2)</sup>	470,881	105,798
	<u>1,841,802</u>	<u>1,692,680</u>
<b>Small Cap Domestic Managers</b>		
BMO Global Asset Management	374,763	360,922
Brandywine Global Investment <sup>(2)</sup>	133,561	0
Denver Investment Advisors	381,269	489,992
Emerald Advisers	265,804	243,939
	<u>1,155,397</u>	<u>1,094,853</u>
<b>Passive Manager</b>		
State Street Global Advisors	266,873	261,260
	<u>266,873</u>	<u>261,260</u>
<b>International Managers</b>		
Globeflex Capital	53,756	298,874
HGK Asset Management <sup>(2)</sup>	375,619	0
Johnston Asset Management <sup>(2)</sup>	278,109	0
Mercator Asset Management	70,436	732,762
WHV Investment Management	429,828	449,151
	<u>1,207,748</u>	<u>1,480,787</u>
<b>Real Estate Managers</b>		
Forest Investment Associates	621,034	616,875
Prudential Real Estate Investments	660,323	668,840
TIAA-CREF Global Real Estate	892,330	681,216
	<u>2,173,687</u>	<u>1,966,931</u>
<b>Total Investment Management Fees</b>	<b>6,645,507</b>	<b>6,496,511</b>
Custodial Fees - BNY Mellon	11,356	10,859
<b>Total Investment Expenses</b>	<b>\$6,656,863</b>	<b>\$6,507,370</b>

<sup>(1)</sup> Investment manager terminated in 2011.

<sup>(2)</sup> Investment manager funded in 2012.

### Ten Largest Common Stock Holdings

As of December 31, 2012 (Fair Value)

Stock	Shares	Fair Value	% of Stock Portfolio
Apple Inc	26,659	\$ 14,187,200	0.96%
Google	15,390	10,886,578	0.74
Qualcomm Inc	171,800	10,627,548	0.72
Microsoft Corp	375,357	10,025,785	0.68
Allergan Inc/US	105,407	9,668,984	0.66
Nike Inc	152,636	7,876,017	0.53
Abbott Laboratories	118,296	7,748,388	0.53
Cognizant Technology Solutions	100,473	7,423,146	0.50
Intuitive Surgical Inc	13,147	6,446,894	0.44
T Rowe Price Group Inc	94,713	6,167,426	0.42

A complete list of portfolio holdings can be obtained from the System.

### Portfolio Summary

As of December 31, 2012

Type of Investment	Cost Value	Fair Value	% of Total Fair Value
<b>Corporate and government bonds</b>			
U.S. Government bonds	\$ 190,811,530	\$ 219,892,609	13%
Corporate bonds	89,752,402	103,431,327	6
<b>Total</b>	<b>280,563,932</b>	<b>323,323,936</b>	<b>19</b>
<b>Common stock</b>			
Domestic	574,971,883	652,955,294	39
International	290,615,811	387,223,332	24
<b>Total</b>	<b>865,587,694</b>	<b>1,040,178,626</b>	<b>63</b>
<b>Other investments</b>			
Real estate equity	234,933,385	243,406,273	15
Cash equivalents	53,520,937	53,520,937	3
<b>Total</b>	<b>288,454,322</b>	<b>296,927,210</b>	<b>18</b>
<b>Grand total</b>	<b>\$1,434,605,948</b>	<b>\$1,660,429,772</b>	<b>100%</b>

### Portfolio Quality

Two-Year Comparative Analysis  
Years Ended December 31, 2012, and 2011

Bond Rating	Fair Value	% of Total Fair Value	% of Total Carrying Value
<b>December 31, 2012</b>			
AAA	\$219,892,609	68%	68%
AA	103,431,327	32	32
A	0	0	0
<b>Total bonds</b>	<b>323,323,936</b>	<b>100%</b>	<b>100%</b>
<b>December 31, 2011</b>			
AAA	195,524,849	66%	66%
AA	102,576,765	34	34
A	0	0	0
<b>Total bonds</b>	<b>298,101,614</b>	<b>100%</b>	<b>100%</b>

Investment Summary (continued)

**Summary of Commissions Paid to Brokers**

Year Ended December 31, 2012

Broker Name	Commissions Paid
Ancora Securities Inc, Jersey City	\$3,227
Assent LLC, Hoboken	471
Avondale Partners LLC, Nashville	3,232
Baird, Robert W & Co Inc, Milwaukee	6,038
Barclays Capital Inc./LE, New Jersey	88
Barclays Capital LE, Jersey City	18,045
Barclays Capital, London	312
BB&T Securities, LLC, Richmond	5,586
Benchmark Company LLC, Brooklyn	40
Bernstein Sanford C & Co, New York	18,910
Bloomberg Tradebook LLC, New York	45,825
BNP Paribas Sec SVCS, London	5,308
BNY Convergenx, New York	47,141
Broadcourt Cap Corp/Sub of MLPF&S,NY	1,092
Buckingham Research Grp Inc, Brooklyn	386
Canaccord Genuity Inc. New York	745
Canaccord Genuity Inc. Jersey City	2,947
Cantor Fitzgerald & Co Inc. New York	5,860
Cap Instl Svcs Inc - Equities, Dallas	27,110
Capital One Southcoast Inc, New Orleans	9,644
Caris & Company Inc, Jersey City	404
Charles River Brokerage LLC, Jersey City	132
Citation Group/BCC Cllg, New York	2,504
Citigroup GBL Mkta Inc, New York	11,134
Citigroup Global Markets LTD, London	7,647
Cowen and Company LLC, New York	10,389
Craig Hallum, Minneapolis	2,319
Credit Agricole Cheuvreux Nordc, Stockholm	721
Credit Lyonnais Secs, Singapore	1,233
Credit Suisse (Europe), London	2,317
Credit Suisse Securities (USA) LLC, NY	10,107
Credit Suisse, New York	98,328
Credit Suisse, Zurich	254
Custom Equity Research DBA, Jersey City	340
Daiwa Sec SMBC Europe LTD, London	9,412
Daiwa SECS Secs Amer Inc, New York	817
Davenport & Co of Virginia, Richmond	488
Den Danske Bank, Copenhagen	578
Deutsche Bk Intl Eq, London	7,030
Deutsche Bk Secs Inc, NY	11,548
Direct Access Partners LLC, New York	3,595
Dougherty Company, Brooklyn	3,253
Dowling & Partners, Jersey City	1,664

Broker Name	Commissions Paid
Evercore Group LLC, Jersey City	1,044
Fidentis Equities SV SA Madrid	4,578
Fox River Execution Tech, LLC, Jersey City	427
Friedman Billings, Washington DC	720
G-Trade Services LTD, Hamilton	3,975
Global Hunter SEC LLC, New Orleans	4,738
Goldman Sachs & Co, NY	25,428
Goldman Sachs Execution & Clearing, NY	6,616
Gordon Hasket Cap Corp, NJ	2,191
Green Street Advisors, Jersey City	1,364
Greentree Brokerage Services, Jersey City	2,497
Height Securities LLC, Jersey City	12
Howard Weil Incorporated, New Orleans	5,808
Instinet Corp, NY	17,405
Investment Technology Group, New York	2,222
ISI Group Inc, NY	5,294
Island Trader Securities, Lake Success	4,173
ITG Canada Corp, Toronto	56
J P Morgan Securities Inc, Brooklyn	22,958
J.P. Morgan Clearing Corp, New York	2,317
Janney Montgomery Scott, Philadelphia	4,614
Jefferies & Co Inc, New York	11,695
Jonestrading Instl Svcs LLC, Westlake	5,887
JP Morgan Chase Bank NA (GST), London	5,082
Keefe Bruyette and Woods, Jersey City	792
Keybanc Capital Markets Inc, New York	13,273
King (CL) & Associates, Albany	1,040
Knight Equity Markets LP, Jersey City	5,393
Lazard Capital Markets LLC, New York	228
Leerink Swann & Co, Jersey City	3,213
Liquidnet Inc, Brooklyn	28,364
Longbow Securities LLC, Jersey City	2,820
Loop Capital Markets, Jersey City	48
M Ramsey King Securities, Burr Ridge	94
Macquarie Securities (USA) Inc, Jersey City	1,802
Mellon, London	2,164
Merrill Lynch Intl London Equities	18,172
Merrill Lynch Pierce Fenner Smith Inc NY	24,533
Merrill Lynch Professional Cllg, Purchas	13,588
Mizuho Securities USA Inc New York	400
MKM Partners LLC, Greenwich	2,555
Morgan Keegan & Co Inc, Memphis	1,092
Morgan Stanley & Co Inc, NY	102,160
Needham & Co, New York	2,778
Noble Intl Investments Inc, Jersey City	205

Broker Name	Commissions Paid
Nomura Financial & Investment, Seoul	398
Nomura Secs Intl Inc, New York	3,789
Nomura Secs Intl, London	6,142
Northland Secs Inc, Jersey City	1,559
Oneil William & Co Inc/BCC, Los Angeles	3,482
Oppenheimer & Co Inc, New York	4,969
Pacific Crest Sec, Portland	113
Pacific Crest Securities, Portland	1,878
Penson Finl Services, Inc/Ridge New York	2,139
Pershing LLC, Jersey City	368
Pickering Energy Partners, Houston	1,770
Piper Jaffray & Co, Minneapolis	7,252
Pulse Trading LLC, Boston	6,723
Raymond James & Assoc Inc, St. Petersburg	15,014
RBC Capital Markets LLC, New York	4,618
Roth Capital Partnerships LLC, Irvine	824
Sandler O'Neill & Partners, New York	728
Sanford C Bernstein & Co Inc, London	879
Scotia Capital (USA) Inc, New York	48
Sidoti & Co LLC, New York	2,448
State Street Global Markets LLC, Boston	24
Stephens Inc, Little Rock	2,796
Sterne Agee & Leach Inc	7,667
Stifel Nicolaus	18,481
Sturdivant and Co Inc, Mount Laurel	4,327
Suntrust Capital Markets Inc, Atlanta	5,806
Svenska Handel Sbanken, New York	686
UBS Equities, London	157,850
UBS Securities LLC, Stamford	26,673
UBS Warburg Asia Ltd, Hong Kong	878
Vandham Securities Corp, New York	3,737
Wedbush Morgan Secs Inc, Los Angeles	3,168
Weeden & Co, New York	16,531
Wells Fargo Securities LLC, Charlotte	1,454
William Blair & Co, Chicago	3,075
WR Hambrecht & Co, Dallas	481
Wunderlich Securities Inc, Memphis	3,810
<b>Total Brokerage Commissions Paid</b>	<b>\$1,076,616</b>

# Investment Guidelines

## INTRODUCTION

The following represents highlights from the Board's investment guidelines adopted on January 21, 2010. These guidelines, which set forth the Board's expectations, restrictions, and policy decisions, were developed to assist the System's staff and consultants in the daily management of the System's assets.

## BACKGROUND

The System is currently experiencing a slight negative cash flow and does expect this trend to gradually increase in the future. The System currently meets routine benefit payments from incoming revenue as opposed to any depletion of invested assets.

The Board adopted two changes to the Investment Guidelines on November 15, 2012 to be implemented in 2013. The Board prohibits investment managers from investing any PMRS assets in any security issued by a corporation that has a contractual relationship with the manager, including where it serves the corporation's 401(k) plan(s). The Board changed the assumed rate of return from six percent (6%) to a five and five tenths (5.5%) annual rate of return net of all expenses and adopted this figure as the regular interest rate to be credited by the System starting January 1, 2013.

## PHILOSOPHY

The Board considers itself a conservative fiduciary, placing the greatest emphasis on quality of investments and consistency in return. Despite this conservative posture, the Board still believes that the five-year rate of return on investments should exceed the recognized market indices for the various asset vehicles. After consideration of the System's 2010 asset allocation study as well as current market trends, the Board established its allocation goals as follows:

Equities (large capitalized firms)	25%
Equities (small capitalized firms)	15%
Equities (international developed markets)	15%
Equities (emerging markets)	10%
Fixed income	20%
Real estate	10%
Timberland	5%

## OBJECTIVE

The Board's investment objective is to benefit PMRS member municipalities by adding value to their assets. Recognizing that inflation can erode value, the Board's goal is to have the fund earn at least 2% more annually than the average annual inflation rate over a long period of time. While this is the System-wide goal, individual investment managers' performance measures rely on other characteristics that are specifically spelled out in the individual contractual service agreement.

## PORTFOLIO CONSTRUCTION

### Short-Term Considerations

It is the Board's desire to remain as fully invested as possible. Therefore, any manager in a cash or cash equivalent position must invest in vehicles authorized by the System. The manager must utilize the System's depository relationship with the State Treasurer who, as custodian of the Fund, will invest all cash on a daily basis in a short-term fund. No management fee will be paid by the System for any portion of a manager's average assets in excess of 5% remaining in cash equivalents at Treasury after the end of any quarter.

### Fixed Income Considerations

The Board seeks to bring income and stability to the overall portfolio through fixed income vehicles. The bond portfolio must be invested in quality vehicles, and it is expected to be diversified from a geographic and industrial standpoint. No single holding of an investment manager other than a U.S. Government bond is to account for more than 5% of the fair value of an investment manager's bond portfolio. The System shall not hold as assets more than 10% of any one bond issue nor more than 5% of the bonds of any one issuing agent. Corporate bonds of any given industry are not to account for more than 25% of the fair value of the bond portfolio.



### Equity Investment Policy

The System's equity portfolio reflects the Board's desire to include growth through market appreciation. The Board requires an equity portfolio with diversification, quality issuance, and underlying value. No single equity holding may account for more than 7.5% of the fair value of the System's equity portfolio. Generally, no single sector should account for more than 20% of the value of an individual manager's portfolio. No more than 1% of the capitalization of any company is to be held by the System. The cumulative holdings of a manager for all of that manager's clients shall account for no more than 5% of the outstanding voting common stock of a corporation.

### Real Estate Policy

The Board believes that diversification in investment vehicles should enhance the potential return on investments without significantly altering the overall risk of the portfolio. Investment decisions regarding the real estate portfolio shall be guided by the objectives to preserve capital, maximize cash distributions and income, achieve a total return competitive with the other asset classes, and maintain a broad diversification of assets and managers. Real estate vehicles may be both direct equity participation and participation in commingled funds that involve equity participation with consideration given to types of properties and geographic location. The investment process and specific limitations shall be detailed in each real estate manager's contract.

### Prohibited Transactions

The Board prohibits (1) purchasing of commodities, mineral rights, and warrants except those previously authorized; (2) short selling and the purchasing of securities on margin; and (3) selling or buying options or future contracts on either fixed income or equity instruments. Leveraged derivatives of any nature or the use of derivatives to create leverage are strictly prohibited.

### Execution and Operation

The System utilizes The Bank of New York Mellon as a master custodian and the Pennsylvania State Treasury as the depository.

Investment managers are directed to execute orders on the best net execution/price basis. Transactional costs and the rate of turnover are monitored. Active equity managers are expected to execute trades on the auction market at a rate close to the execution-only cost (currently averaging three cents per share or less).

The investment managers may enter into agreements with certain brokerage houses in order to participate in a recapture program whereby a designated percentage of the System's trades handled by these brokerage firms will be returned as cash to the System and be treated as new income for the benefit of the membership. It is expected that under such an arrangement, the average execution cost of all trades will approximate the execution-only price.

The Board assumes full responsibility for exercising the voting privilege contained in proxy solicitations generated by companies domiciled in the U.S. and has adopted specific guidelines for staff guidance. These guidelines as adopted and hereafter amended are an integral part of the System's investment guidelines. Proxy solicitations by non-U.S. domiciled companies are handled by the investment manager that holds the security of that company in their portfolio.

### Communications

The Board expects an open and constant line of communication between the System's staff and investment managers. Reports required of investment managers to the Board and staff include a timely confirmation of all transactions, a monthly summary of transactions, a quarterly statement of asset values at cost and fair value, any explanation of contemplated major shifts in investment strategy or manager style before implementation, and an explanation of major changes in organization or the personnel associated with the System's account. Active equity managers

## Investment Guidelines (continued)

are required to report on a quarterly basis the average commission price per share traded during the quarter. In addition to the written reports, the investment managers are obligated to make periodic personal appearances before the Board as specifically spelled out in the investment manager's contract.

Investment managers' fees are paid in hard dollars. The cost for each investment manager is based on the fair value of the firm's quarterly average balance in the System's portfolio.

### **Monitoring**

The System monitors the performance of its investment managers through direct involvement of the Board, the System's staff, and any consultant hired for this purpose by the Board.



**TODAY**

**TOMORROW**

**YESTERDAY**

**ACTUARIAL**

**"I like the dreams of the future better than the history of the past."**

**~Thomas Jefferson**

## Actuary's Certification Letter



Classic Values, Innovative Advice

June 20, 2013

Pennsylvania Municipal Retirement Board of the  
Pennsylvania Municipal Retirement System  
c/o James B. Allen, Secretary  
P.O. Box 1165  
Harrisburg, PA 17108-1165

Dear Members of the Board:

At your request, we have conducted the annual actuarial valuation of the Pennsylvania Municipal Retirement System (the System) as of January 1, 2012. The results of the valuation are contained in our report. The funded ratio of the System as of January 1, 2012 was 103.8% funded on an actuarial asset value basis and 86.3% funded on a market value basis.

The purpose of this report is to present the annual actuarial valuation of the System. This report is for the use of the Pennsylvania Municipal Retirement Board and its auditors in preparing financial reports in accordance with applicable law and accounting requirements. Any other user of this report is not an intended user and is considered a third party. This report contains analyses which combine asset and liability performance and projections.

This is a multiple employer retirement system for participating municipalities and counties. Assets and liabilities are separately accounted for and reported to the Public Employee Retirement Commission of the Commonwealth of Pennsylvania. This report reflects aggregate valuation results for the System and provides statistics on employer contribution levels for the defined benefit portion of the municipal plans participating in the system as of the valuation date, the updated methods and assumptions effective January 1, 2012.

Our report contains required disclosures for the entire System and a description of the funding methods and assumptions as required by State law and covered under Act 205 which also fall within the methods as defined as acceptable under the Governmental Accounting Standards Board Statement #25.

In preparing our report, we relied without audit, on information (some oral and some written) supplied by the System. This information includes, but is not limited to, the plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice #23. The report provides comments on the sources and reliability of both the data and the actuarial assumptions on which our findings are based. Those comments are the basis for our certification that this report is complete to the best of our knowledge. We rely on future System experience conforming to the underlying assumptions. To the extent that actual System experience deviates from the underlying assumptions, the results would vary accordingly.

The assumptions used in preparing the individual municipal valuation have been determined and adjusted based on actuarial experience analysis and presented to the Board for consideration and adoption. The actuarial methods were adopted effective January 1, 1985 unless otherwise indicated. The funding method applied provides for an annual normal cost as a level percent of pay and amortization of unfunded and/or surplus over a fixed period in accordance with provisions of Act 205. The complete actuarial valuation report as of January 1, 2012 is included as an attachment to his letter.



The figures and data disclosed in the following schedules for the Financial and Actuarial sections were provided by Cheiron for 2007-2012. For years prior to 2007, the prior actuary developed the results as reported per their valuation reports.

1. Actuarial Liability compared with Actuarial Value for Funding Purposes to the CAFR.
2. Solvency Test
3. Funded Status of Actuarial Liabilities
4. Required Supplemental Information - Schedule of Funding Progress
5. Schedule of Retirees and Beneficiaries
6. Schedule of Total Membership
7. Schedule of Total Membership Funded Status of Actuarial Liabilities
8. Schedule of Active Member Valuation Data
9. Schedule of Funding Progress
10. Actuarial Methods and Significant Assumptions

To the best of our knowledge, this report and its contents, which are based on the information and data supplied by the Pennsylvania Municipal Retirement System, have been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this report. This report does not address any contractual or legal issues. We are not attorneys and our firm does not provide any legal services or advice.

Sincerely,  
Cheiron



Kenneth A. Kent, FSA, FCA  
Principal Consulting Actuary



Karen M. Zangara, FSA  
Consulting Actuary



### The Actuarial Liability Compared with the Actuarial Value of Assets for Funding Purposes

Comparable two-year schedule for years January 1, 2012 and January 1, 2011

GASB No. 25 Basis	January 1, 2012	January 1, 2011
1. Actuarial Liabilities for retirees and beneficiaries currently receiving benefits and terminated not yet receiving benefits	\$639,260,852	\$655,645,661
2. Actuarial liabilities for current employees	<u>1,087,956,417</u>	<u>1,018,258,484</u>
3. Total actuarial liability (1 + 2)	\$1,727,217,269	\$1,673,904,145
4. Net final actuarial assets available for benefits	<u>1,792,809,433</u>	<u>1,713,751,974</u>
5. Unfunded/(surplus)Participants in cash balance-only plans actuarial liability (3 - 4)	\$(65,592,164)	\$(39,847,829)





**Solvency Test**  
Aggregate Accrued Liabilities for

Valuation Date January 1,	Active Member Contributions (1) <sup>(1)</sup>	Retirees & Beneficiaries (2)	Active Member Employer Financed Contributions (3)	Actuarial Value of Reported Assets	Portion of Accrued Liabilities Covered by Reported Assets		
					(1)	(2)	(3)
2012	\$407,199,633	\$639,260,852	\$680,756,784	\$1,792,809,433	100%	100%	100%
2011	395,048,320	655,645,661	623,210,164	1,713,751,974	100%	100%	106%
2010	348,126,106	589,362,501	622,868,929	1,620,150,779	100%	100%	110%
2009	333,142,928	538,733,517	579,760,819	1,540,152,742	100%	100%	115%
2008	321,567,969	461,965,617	593,667,414	1,458,148,442	100%	100%	114%
2007	293,593,948	471,770,821	516,657,229	1,336,009,295	100%	100%	110%

**Funded Status of Actuarial Liabilities**

GASB Statement No. 25 Disclosure

Valuation Date January 1,	Actuarial Value of Assets (A)	Actuarial Liability (AL) Entry Age (B)	Unfunded AL (Surplus) (B-A)	Funded Ratio (A/B)
2012	\$1,792,009,433	\$1,727,217,269	\$(65,592,764)	103.8%
2011	1,713,751,974	1,673,904,145	(39,847,829)	102.4%
2010	1,620,150,779	1,560,357,536	(59,793,243)	103.8%
2009	1,540,152,742	1,451,637,264	(88,515,478)	106.1%
2008	1,458,148,442	1,377,201,000	(80,947,442) <sup>(2)</sup>	105.9%
2007	1,336,009,295	1,282,021,998	(53,987,297)	104.2%

The actuarial assumptions as of January 1, 2012, are shown in the assumptions and methods section. The above information was derived from the following membership data, as provided by the System, regarding:

- ◆ Four county defined benefit plans required to redetermine contribution levels as of January 1, 2012;
- ◆ 707 defined benefit non-county plans and 229 cash balance plans as of January 1, 2011;
- ◆ Five county defined benefit plans required to redetermine contribution levels as of January 1, 2010;
- ◆ 696 defined benefit non-county plans and 203 cash balance plans as of January 1, 2009;
- ◆ Four county defined benefit plans required to redetermine contribution levels as of January 1, 2008;
- ◆ 679 defined benefit non-county plans and 177 cash balance plans as of January 1, 2007;

<sup>(1)</sup> This includes the sum of the active member employee contribution balances, the member separate annuity account balances, the municipal for separate annuity account balances, and the excess interest allocations.



## Note to Required Supplementary Information

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at the date indicated. Additional information as of the latest actuarial valuation follows:

Valuation date	January 1, 2012
Actuarial cost method	Entry age
Amortization method	Level dollar for Plan Bases and an average for Aggregate Gain/Loss, 10% of surplus is credited against aggregate cost where applicable
Actuarial assumptions:	
Investment rate of return <sup>(1)</sup>	6.0%
Projected salary increases <sup>(1)</sup>	3.0% - 8.3%
<sup>(1)</sup> Includes inflation at	3.0%
Cost-of-living adjustments	ad hoc

The actuarial assumptions used have been recommended by the actuary and adopted by the System's Board based on the most recent review of the System's experience completed in 2010.

The rate of employer contributions to the System is composed of the normal cost, amortization of the unfunded actuarial liability and an allowance for administrative expenses. The normal cost is a level percent of payroll cost which, along with member contributions, will pay for projected benefits at retirement for the average plan participant. The actuarial liability is that portion of the present value of projected benefits that will not be paid by future employer normal costs or member contributions. The difference between this liability and the funds accumulated as of the same date is the unfunded actuarial liability. The allowance for administrative expenses is based upon the System's actual administrative expenses.

### Schedule of Retirees and Beneficiaries

Added to and Removed from Rolls in Last Six Years

Valuation Date	Added to Roll	Average Annual Annuities Added <sup>(1)</sup>	Deleted from Roll	Average Annual Annuities Removed <sup>(1)</sup>	Number on Roll	Annual Annuities	Percentage Increase in Annuities	Average Annual Annuities	Percentage Increase in Average Annual Annuities
January 1, 2012	438	\$16,404	228	\$14,252	4,394	\$59,411,245	7.5%	\$13,521	2.4%
2011	396	18,624	121	8,981	4,184	55,257,189	13.0%	13,207	5.6
2010	296	16,030	137	9,458	3,909	48,897,954	7.7	12,509	3.3
2009	271	13,883	119	11,494	3,750	45,414,210	5.9	12,110	1.6
2008	236	12,780	97	8,921	3,598	42,895,559	7.6	11,922	3.4
2007	252	12,828	170	N/A	3,459	39,870,509	5.1	11,527	2.6

<sup>(1)</sup> In 2007, the System contracted a new actuary and implemented a computer software package. Historical information is not available prior to 2007.



## Schedule of Total Membership

Six Year Trend

Valuation Date January 1,	Active Members Defined Benefit Plans	Active Members Cash Balance Plans	Retirees	Beneficiaries	Deferred Pensions	Inactive Members	Total
2012	7,836	1,158	3,899	495	952	21	14,361
2011	8,091	1,119	3,707	477	945	42	14,381
2010	8,357	994	3,449	460	834	23	14,117
2009	8,411	978	3,289	461	847	0	13,986
2008	8,383	950	3,173	425	744	7	13,682
2007	8,314	918	2,965	494	723	33	13,447

## Funded Status of Actuarial Liabilities

Schedule of Total Membership Over Last Six Years

	As of January 1 <sup>(1)</sup>					
	2012	2011	2010	2009	2008	2007
a. Retirees currently receiving benefits	3,899	3,707	3,449	3,289	3,173	2,965
b. Beneficiaries currently receiving benefits	495	477	460	461	425	494
c. Terminated vested employees entitled to future benefits from DB plans	723	711	647	650	570	561
d. Terminated non-vested employees entitled to contribution refunds from DB plans	21	42	23	0	7	33
e. Active employees in defined benefit plans	7,836	8,091	8,357	8,411	8,383	8,314
i. Aggregate salary	\$366,882,467	\$383,802,844	\$377,960,930	\$372,370,037	\$364,865,185	\$358,690,830
ii. Vested <sup>(2)</sup>	4,964	4,992	5,025	4,952	4,913	4,430
iii. Non-vested	2,872	3,099	3,333	3,459	3,470	3,884
f. Participants in cash balance-only plans	1,387	1,353	1,181	1,175	1,124	1,080
i. Aggregate salary <sup>(3)</sup>	\$41,143,383	\$41,683,065	\$35,104,086	\$32,811,919	\$31,107,136	\$28,213,485
ii. Active	1,158	1,119	994	978	950	918
iii. Inactive	229	234	187	197	174	162

<sup>(1)</sup> Years 2007, 2008, 2009, 2010, 2011 and 2012 include defined benefit non-county plans, defined benefit county plans, and cash balance-only plans.

<sup>(2)</sup> Count of vested participants estimated based on service as of valuation date.

<sup>(3)</sup> Actual salary for preceding valuation date. Projected salary at 5% for year following valuation for 2008 only.



### Schedule of Active Member Valuation Data

Last Six Years

Defined Benefit Plans								
Valuation Date 1/1	Number of Active Members	Percentage Change in Membership	Number of Participating Employers	Percentage Increase in Number of Participating Employers	Total Annual Payroll	Percentage Increase in payroll	Average Annual Salary	Percentage Increase in Average Annual Salary
2012	7,836	(3.2)%	709	0.3%	\$366,882,467	(4.4)%	\$46,820	(1.3)%
2011	8,091	(3.2)	707	1.4	383,802,844	1.5	47,436	4.9
2010	8,357	(0.6)	697	0.1	377,960,930	1.5	45,227	2.2
2009	8,411	0.3	696	0.5	372,370,037	2.0	44,272	1.7
2008	8,383	0.8	692	1.3	364,865,000	1.7	43,524	0.9
2007	8,314	(0.7)	683	0.0	358,691,000	7.6	43,143	8.4

Cash Balance Plans								
Valuation Date 1/1	Number of Active Members	Percentage Change in Membership	Number of Participating Employers	Percentage Increase in Number of Participating Employers	Total Annual Payroll	Percentage Increase in payroll	Average Annual Salary	Percentage Increase in Average Annual Salary
2012	1,158	3.5%	240	4.8%	\$41,143,383	(1.3)%	\$35,530	(4.6)%
2011	1119	12.6	229	13.4	41,683,065	18.7	37,250	5.5
2010	994	1.6	203	(.5)	35,104,086	6.9	35,316	5.3
2009	978	3.0	204	10.0	32,811,919	5.5	33,550	2.5
2008	950	3.5	183	3.4	31,107,000	10.3	32,744	6.5
2007	918	2.5	177	2.9	28,213,000	1.0	30,734	(1.6)

## Actuarial Assumptions and Methods

### Actuarial Assumptions

The current PMRS actuarial assumptions used in this study are as follows.

#### A. Healthy Life Mortality rates:

Sample rates are shown at right:

- (a) Killed in service mortality rates:
  - (i) 15% of mortality is assumed to be service related for municipal plans, and
  - (ii) 50% of mortality is assumed to be service related for uniform plans.

Age	Healthy Life Mortality Rates			
	Actives (Males RP2000+1) Females RP2000+5)		Retirees (RP2000 Sex Distinct)	
	Male	Female	Male	Female
50	0.20%	0.11%	0.21%	0.17%
55	0.32	0.17	0.36	0.27
60	0.59	0.27	0.67	0.51
65	1.13	0.51	1.27	0.97
70	1.98	0.97	2.22	1.67
75	3.39	1.67	3.78	2.81
80	5.79	2.81	6.43	4.59
85	9.98	4.59	11.08	7.74



**B. Disabled Life Mortality Rates**

Mortality under healthy life table for a life 10 years older.

**C. Termination Rates Before Retirement:**

For all plans for Municipal and Police, the termination rates indicated below were used;

Termination Rates before Retirement				
Years of Service	Current Valuation Rate <sup>(1)</sup>			
	Uniformed Number of active members in plan		Municipal Number of active members in plan	
	<25	>25	<25	>25
Less than 1	14%	13%	20%	20%
1 but less than 2	14	10	20	20
2 but less than 3	12	7	12	15
3 but less than 4	10	7	10	12
4 but less than 5	6	6	8	7
5 but less than 6	4	5	6	7
6 but less than 7	3	4	4	6
7 but less than 8	2	3	3	5
8 but less than 9	2	3	3	5
9 but less than 10	1	3	2.5	5
10 or more	1	3	2.5	3

Municipal Rates	
Age	Current Valuation Rate (%)
25	0.034%
35	0.059
45	0.144
55	0.404
65	0.928

**D. Disability Incidence Rates:**

Municipal - 40% of 1964 OASDI (Social Security) Experience for Males. Sample rates are to the left:

Uniformed Rates	
Age	Current Valuation Rate (%)
25	0.051%
35	0.088
45	0.216
55	0.605
65	1.393

Uniformed plans - 60% of 1964 OASDI (Social Security) Experience for Males. Sample rates are shown at right:

Type of disability:

- (i) 15% of disablements are assumed to be service related for municipal plans
- (ii) 50% of disablements are assumed to be service related for uniform plans.

**E. Workers Compensation:**

Service related disability benefits payable from municipal plans are offset by 25% of final average salary.

**F. Salary Scale:**

Three year select rates include 3.0% inflation and age-related scale for merit/seniority based on sample rates as shown at right plus 2% during the select period only then reverting to inflation and merit/seniority thereafter. Final actual salary plans assume an additional 6% at retirement.

Sample Salary Rates	
Age	Total Rate (%) <sup>(2)</sup> (including inflation)
25	8.3%
30	6.4
35	5.6
40	5.0
45	4.2
50	4.1
55	3.9
60	3.7
65	3.0

Sample rates are:

**G. Retirement age:**

The age at which unreduced benefits are available. No early retirement is assumed. Specific assumptions regarding retirement age are:

a) Municipal Members:

Members are assumed to retire over a range of ages as shown to the right.

b) Uniformed Members: (retirement rates are reflected in the chart on page 58)

Retirement Assumptions	
Age	Current Rate of Normal Retirement <sup>(3)</sup>
Under 46	5%
46 - 54	15
55 - 59	10
60 - 61	10
62	30
63 - 64	20
65	35
66 - 74	15
75	100

Inactive vested members are assumed to retire when first eligible for unreduced benefits.

<sup>(1)</sup> No termination rates are applied once the employee becomes eligible for voluntary early or normal retirement.

<sup>(2)</sup> Add 2% for each of the first 3 years of service.

<sup>(3)</sup> Rates indicated are adjusted by adding 5% (and 10% for ages 60-62 under current rate assumptions) for the year in which the member is first eligible for normal retirement.



**H. Marital Status and Spouse's**

**Age**<sup>(1)</sup>: 85 percent of active members and are assumed to be married for retirees with the 50% J&S form of payment. Male spouses are assumed to be three years older than female spouses.

**I. Social Security Projections**<sup>(1)</sup>:

- a) The Social Security Taxable Wage Base will increase by 3.5% compounded annually;
- b) The Consumer Price Index will increase by 3.0% compounded annually;
- c) The Average Total Wages of All Workers will increase by 3.5% compounded annually.

Retirement Rates for Uniform Participants

Age	Rates for all Plans	
<49		0%
50		20
51		10
52		10
53		10
54		10
55		20
56		25
57		25
58		30
59		30
60		40
61		50
62		50
63		60
64		70
65		80
66+		100

**J. Post-Retirement Cost of Living Increases**<sup>(1)</sup>:

3.0% per year, subject to plan limitations.

**K. Net Investment Return:**

6.0% compounded annually (net of investment and certain administration expenses) for funding purposes.

**L. Administrative Expenses:**

The reserve for non-investment related expenses of the System, net the \$20 per participant annual assessment is based on expected expenses for the current year. The amount allocated for 2012 is \$3,702,700 compared to \$3,310,900 for 2011.

**Actuarial Methods**

Contribution requirements are individually determined for each participating municipality, on an actuarial basis as described below, at least biannually. The frequency of actuarial valuation is determined by

applicable Commonwealth statute (Act 205 of 1984 and Act 293 of 1972). The following actuarial methods were adopted effective January 1, 1985, unless indicated otherwise.

**ACTUARIAL VALUE OF ASSETS:**

Sum of all audited reserve accounts as of the valuation date, including Member, Municipal, Retired, and Disability Reserves, and a one-year administration expense reserve, plus the portion of any additional investment income to be distributed as "excess interest." The actuarial value can never be less than 90 percent of fair market value.

Each year, municipalities receive an excess interest allocation derived as a portion of new surplus created during the prior year. "Surplus" refers to the excess of fair market value over the actuarial value of assets. Once the preliminary actuarial asset value has been determined, a formula is used to allocate the new surplus. Generally, depending on the relative size of surplus to fair market value, between 10 percent and 90 percent of the new surplus will become excess interest.

Based on the unique legislative structure of PMRS, because assets are set equal to reserves under the System, they do not necessarily relate directly or indirectly with the current market value of assets as required under Actuarial Standard of Practice Statement No. 44 which states under section 3.3:

*"...the actuary should select an asset valuation method that is designed to produce actuarial values of assets that bear a reasonable relationship to the corresponding market values. The qualities of such an asset valuation method include the following:*

- a. The asset valuation method is likely to produce actuarial values of assets that are some times greater than and sometimes less than the corresponding market values.

<sup>(1)</sup> If applicable.



b. The asset valuation method is likely to produce actuarial values of assets that, in the actuary's professional judgment, satisfy both of the following:

1. *The asset values fall within a reasonable range around the corresponding market values. For example, there might be a corridor centered at market value outside of which the actuarial value of assets may not fall, in order to assure that the difference from market value is not greater than the actuary deems reasonable.*
2. *Any differences between the actuarial value of assets and the market value are recognized within a reasonable period of time. For example, the actuary might use a method where the actuarial value of assets converges toward market value at a pace that the actuary deems reasonable, if the investment return assumption is realized in future periods.*

*In lieu of satisfying both (1) and (2) above, an asset valuation method could satisfy section 3.3(b) if, in the actuary's professional judgment, the asset valuation method either (i) produces values within a sufficiently narrow range around market value or (ii) recognizes differences from market value in a sufficiently short period."*

On this basis, the administrative rules adopted by the PMRS Board, which are not subject to comply with Actuarial Standards of Practice (ASOP), when defining the Actuarial Value of Assets, does not necessarily meet the requirement of ASOP 44 Selection and Use of Asset Valuation Methods for Pension Valuations.

## **ACTUARIAL COST METHOD**

Entry Age Normal Actuarial Cost Method.

Entry age is defined as attained age less credited service. The normal cost rate is derived as a level percent of future compensation of current employees, on an individual basis. This rate is applied to the projected payroll and projected employee contributions are deducted. Actuarial gains (or losses), including the effect of contributions greater or lesser than the

previously determined actuarial level, are reflected by decreases (or increases) in the unfunded actuarial liability. Under Act 205 of 1984, the unfunded actuarial liability is amortized as a level dollar amount over the lesser of:

- a)
  - i. 30 years, with respect to the initial liability as of 1/1/85 (or first valuation);
  - ii. 20 years, with respect to actuarial gains and losses;
  - iii. 15 years, with respect to changes due to actuarial assumptions;
  - iv. 10 years, with respect to changes due to plan provisions;
  - v. 1 year, with respect to changes in benefits for currently retired members,
  - vi. 20 years, with respect to state mandated benefit changes; or
- b) the average assumed working lifetime of active employees as of the date the liability was established<sup>(1)</sup>.

With the two exceptions which follow, the funding method is applied individually with respect to each municipality:

- 1) Retired and disabled members are paid monthly benefits from the System's Retired Reserve account, which at the time of retirement receives a transfer from the municipal and member accounts in an amount actuarially determined to be sufficient to pay all future benefits for the member (and, if applicable, a surviving beneficiary). Thus, post-retirement experience is pooled with the System. (However, this procedure does not apply to the legislated ad-hoc adjustments effective January 1, 1989.)
- 2) A disabled member's pension is met in part from the amount that can be provided by the value of that portion of the member's accrued benefit attributable to municipal contributions,

<sup>(1)</sup> If there are no active employees, the unfunded liability is amortized one year after the liability was established.





with the balance of the pension being provided by the appropriate transfer from the Disability Reserve Account. The amount of annual transfer from the accumulated municipal contributions to the Disability Reserve Account is determined on the one year term cost basis, i.e. the expected cost of disabilities in the coming year.

**CHANGES IN ACTUARIAL ASSUMPTIONS AND METHODS:**

There were no changes in the actuarial assumptions from last year to this year.

---

**Notes to Actuarial Section**

**ASSUMPTION ANALYSIS**

The System does not conduct an extensive experience study by individual plan because the magnitude of any change in plans of average size becomes misleading and irrelevant. An actuarial experience study covering the period 1/1/2005 to 12/31/2008 was used by the Board as the basis to adopt (with the actuary's recommendation) several changes in assumptions that were implemented with the January 1, 2011 actuarial valuation.





**TODAY**

**TOMORROW**

**YESTERDAY**

**"Times and conditions change so rapidly that we must keep our aim constantly focused on the future."**

**~Walt Disney**

**STATISTICAL**

## Part I - Financial

### Introduction

The objectives of the statistical section are to provide additional historical perspective, context, and relevant details to assist readers in using information in the financial statements, notes to the financial statements, and required supplementary information in order to understand and assess the System's overall financial condition. In support of these objectives, the System has implemented GASB Statement No. 44, Economic Condition Reporting: The Statistical Section. This statement establishes standardized reporting requirements relative to the supplementary information provided in this section.

The schedules beginning on page 65 compare the revenues versus expenses of the System and include total investments of the System for the past ten years. The schedules also show operating information. The operating information is intended to provide contextual information about the System's operations to assist in assessing the System's economic condition. These schedules provide detailed information about the trends of key sources of additions and deductions to the System's assets, which assist in providing a context framing how the System's financial position has changed over time.

The schedules beginning on page 68 provide information relative to membership. The schedules and graphs reflect changes in active and retired members of the System. The information is intended to provide contextual information about the System's membership and framework for the ratio of funding versus obligations. The schedules beginning on page 71 provide information relative to pension payments and pensions awarded. The information is intended to provide contextual information about payment trends of the System.

All non-accounting data is derived from the System's internal sources.

### Number of Members Per Plan

(Plans with 100 or more members)

Plan	Members	%
Allentown City	809	5.63
Adams County	725	5.04
Bethlehem City	659	4.58
Harrisburg City	456	3.17
Jefferson County	257	1.79
Harrisburg City Fire	194	1.35
Monroeville Municipality	190	1.32
Easton City	175	1.22
Bucks County Water & Sewer Authority	147	1.02
Pottstown Borough	135	0.94
Tredyffrin Township	112	0.78
Upper Moreland Township	109	0.76
Whitehall Township	103	0.72

### Changes in Net Position

Last Ten Years

Fiscal Year	Contributions	Investment Income	Benefit Expenses	Administrative Expenses	Change in Net Position
2012	\$59,253,955	\$187,755,253	\$71,827,710	\$3,424,363	\$171,257,135
2011	61,265,501	(29,086,613)	81,155,883	3,142,004	(52,118,999)
2010	61,930,391	180,338,425	63,383,838	3,183,253	175,701,725
2009	54,933,975	210,272,809	66,048,632	3,203,478	195,954,674
2008	49,693,605	(387,077,602)	53,771,225	2,986,656	(394,141,878)
2007	46,833,548	114,838,806	49,905,064	2,862,482	108,904,808
2006	37,749,106	161,140,029	62,491,362	2,920,868	133,476,905
2005	36,215,118	100,261,568	48,537,912	3,108,239	84,830,535
2004	33,126,179	140,070,192	45,048,440	3,127,096	125,020,835
2003	29,726,673	208,542,292	39,791,186	2,610,839	195,866,940

### Revenues by Source

Last Ten Years

Fiscal Year	Revenues by Source				Total Revenue
	Member Contributions	Municipal Contributions <sup>(1)</sup>	Municipal Assessments <sup>(2)</sup>	Investment Income	
2012	\$20,981,612	\$37,974,023	\$298,320	\$187,755,253	\$247,009,208
2011	20,732,344	40,231,586	301,571	(29,086,613)	32,178,888
2010	20,684,591	40,949,360	296,660	180,338,425	242,268,816
2009	19,331,869	35,309,446	292,660	210,272,809	265,206,784
2008	17,870,426	31,532,859	290,320	(387,077,602)	(337,383,997)
2007	17,491,672	29,059,248	282,628	114,838,806	161,672,354
2006	16,316,197	21,148,089	284,820	161,140,029	198,889,135
2005	16,046,984	19,890,494	277,640	100,261,568	136,476,686
2004	15,821,360	17,041,418	263,401	140,070,192	173,196,371
2003	14,760,323	14,696,210	270,140	208,542,292	238,268,965

<sup>(1)</sup> Contributions were made in accordance with actuarially determined contribution requirements.

<sup>(2)</sup> Municipal assessments are receipts but not assets of the plans.

**Expenses by Type**  
Last Ten Years

Fiscal Year	Benefit Expenses		Administrative Expenses	Total Expenses
	Annuity	Termination		
2012	\$63,390,100	\$8,437,610	\$3,424,363	\$75,252,073
2011	63,105,165	18,050,718	3,142,004	84,297,887
2010	54,771,528	8,612,310	3,183,373	66,567,211
2009	52,267,003	13,781,629	3,203,478	69,252,110
2008	46,173,544	7,597,681	2,986,656	56,757,881
2007	42,898,882	7,006,182	2,862,482	52,767,546
2006	44,136,795	18,354,567	2,920,868	65,412,230
2005	38,206,205	10,331,707	3,108,239	51,646,151
2004	34,730,243	10,318,197	3,127,096	48,175,536
2003	32,212,191	7,578,995	2,610,839	42,402,025

**Schedule of Benefit Deductions from Plan Net Assets by Type**  
Last Six Years <sup>(1)</sup>

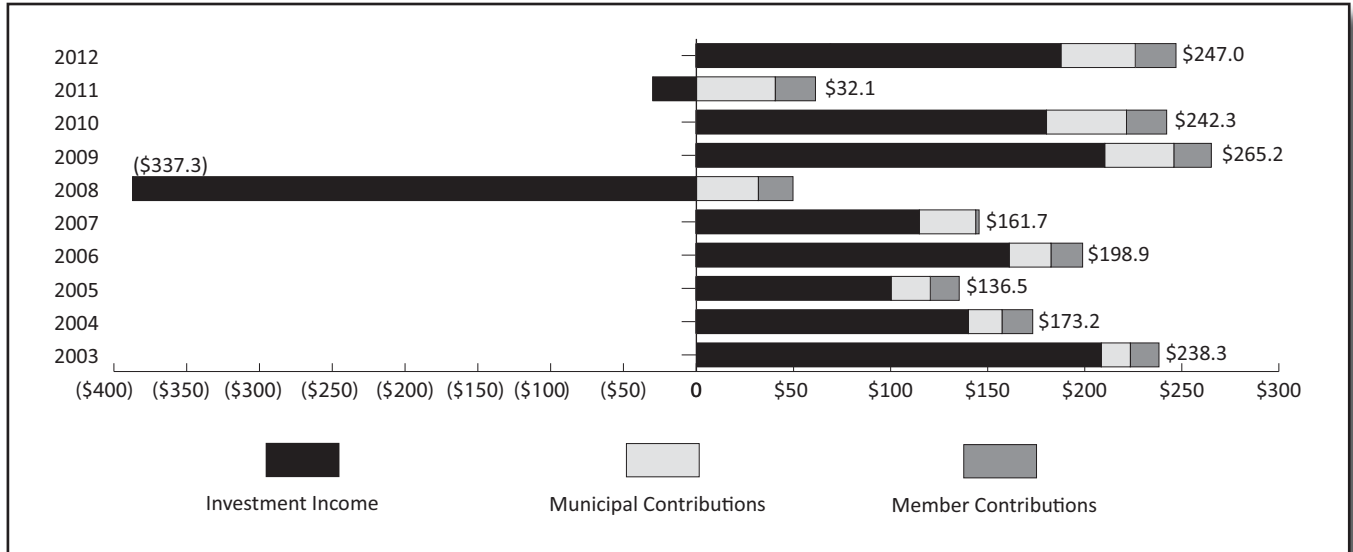
Fiscal Year	Expenses by Type						Total Annuity
	Normal	Early	Disability	Survivor	Death	Transfer and Other	
2012	\$47,951,194	\$7,545,724	\$1,347,255	\$4,848,070	\$1,678,836	\$19,021	\$63,390,100
2011	44,166,996	6,161,604	1,257,354	4,497,860	2,241,312	4,780,038	63,105,165
2010	38,721,068	4,263,362	1,392,815	4,376,019	2,653,312	3,364,952	54,771,528
2009	36,648,826	3,780,903	2,462,766	4,284,030	3,523,786	1,566,692	52,267,003
2008	34,911,175	4,549,688	1,351,900	3,897,639	1,397,947	65,195	46,173,544
2007	31,560,201	4,397,101	1,318,921	3,975,518	1,085,900	561,242	42,898,882

**Schedule of Refund Deductions from Plan Net Assets by Type**  
Last Six Years <sup>(1)</sup>

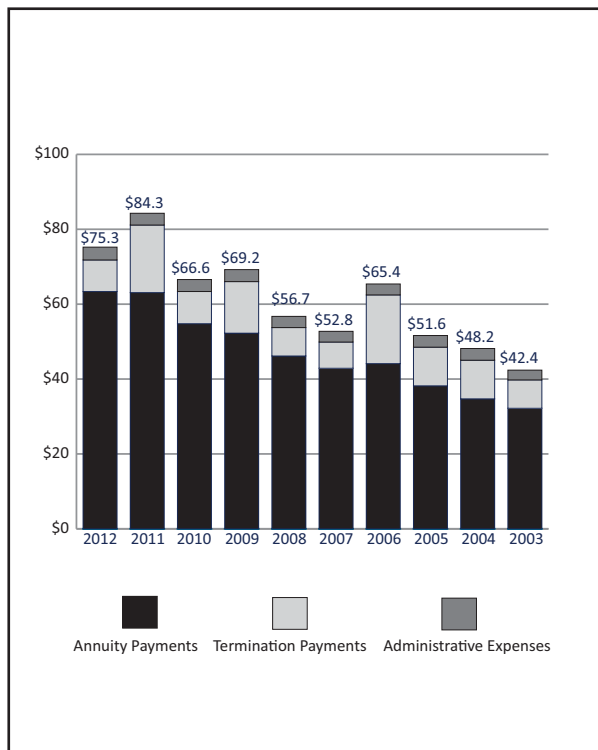
Fiscal Year	Expenses by Type		
	Terminations	Lump Sum	Total Refunds
2012	\$3,908,772	\$4,528,838	\$8,437,610
2011	12,421,382	5,629,336	18,050,719
2010	5,657,499	2,954,811	8,612,310
2009	11,189,048	2,592,581	13,781,629
2008	6,675,755	921,926	7,597,681
2007	4,262,309	2,743,873	7,006,182

<sup>(1)</sup> Information prior to 2007 is not available.

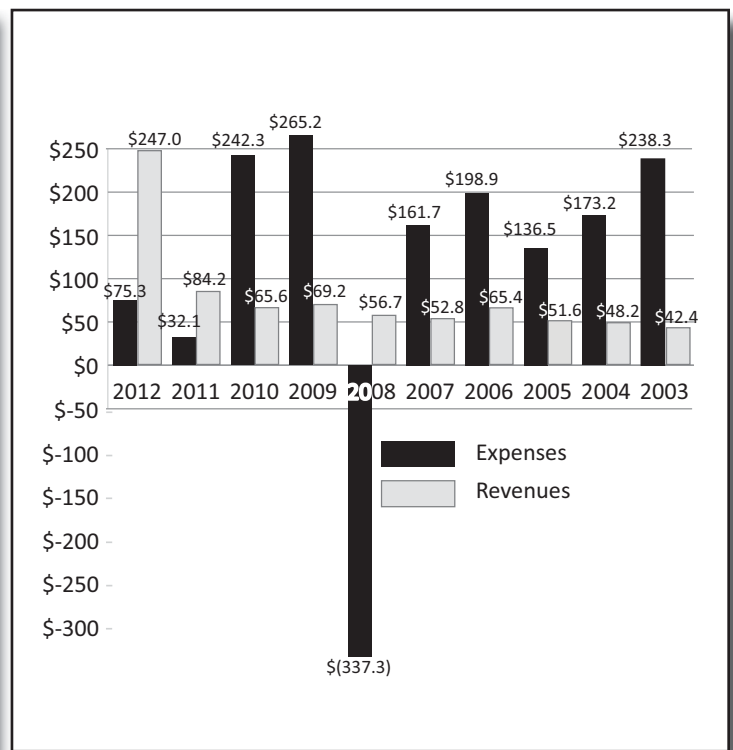
### Revenues by Source - Ten-Year Trend (Amounts in Millions)



### Expenses by Type Ten-Year Trend (Amounts in Millions)

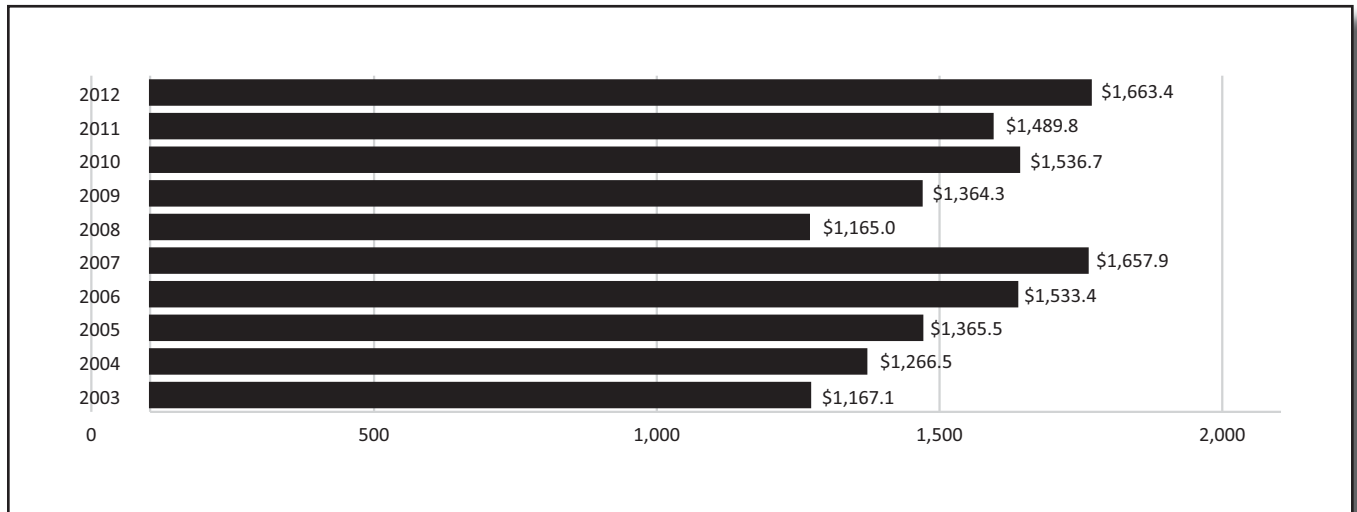


### Revenues vs. Expenses Ten-Year Trend (Amounts in Millions)



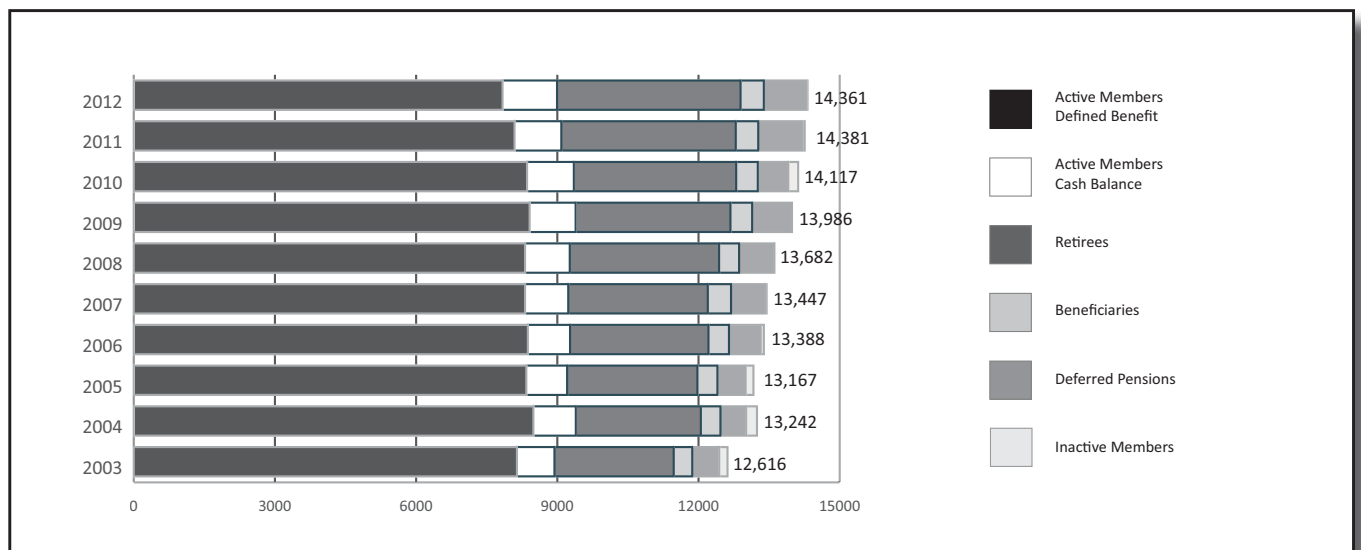
### Total Investments - Ten Year Trend

(Fair Value - Amounts in Millions)



### Total Membership - Ten-Year Trend

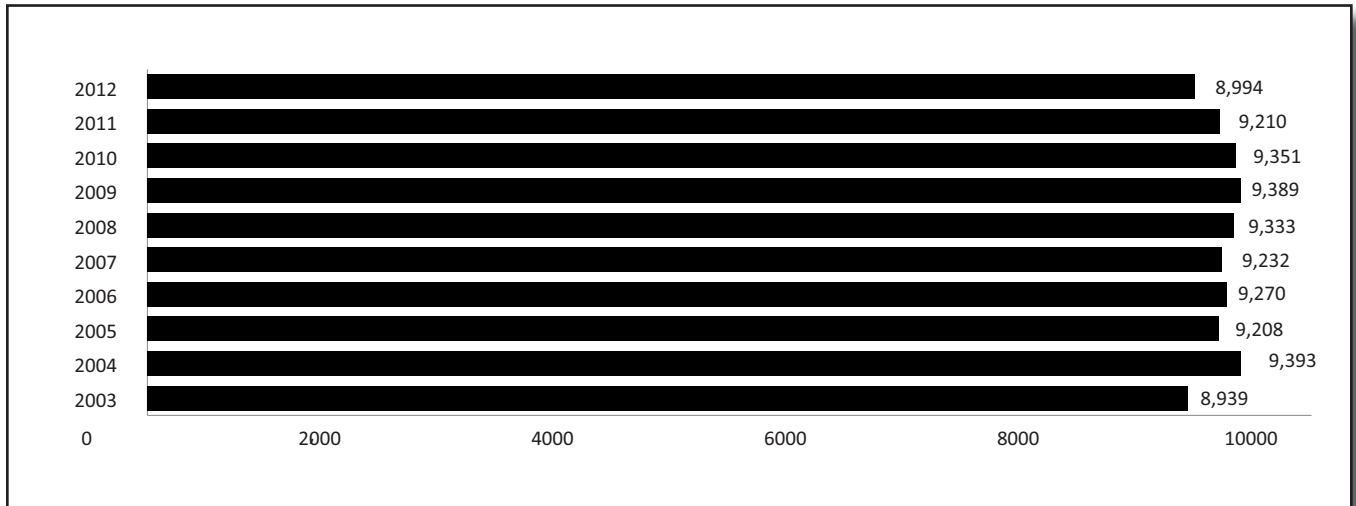
Valuation Date 1/1





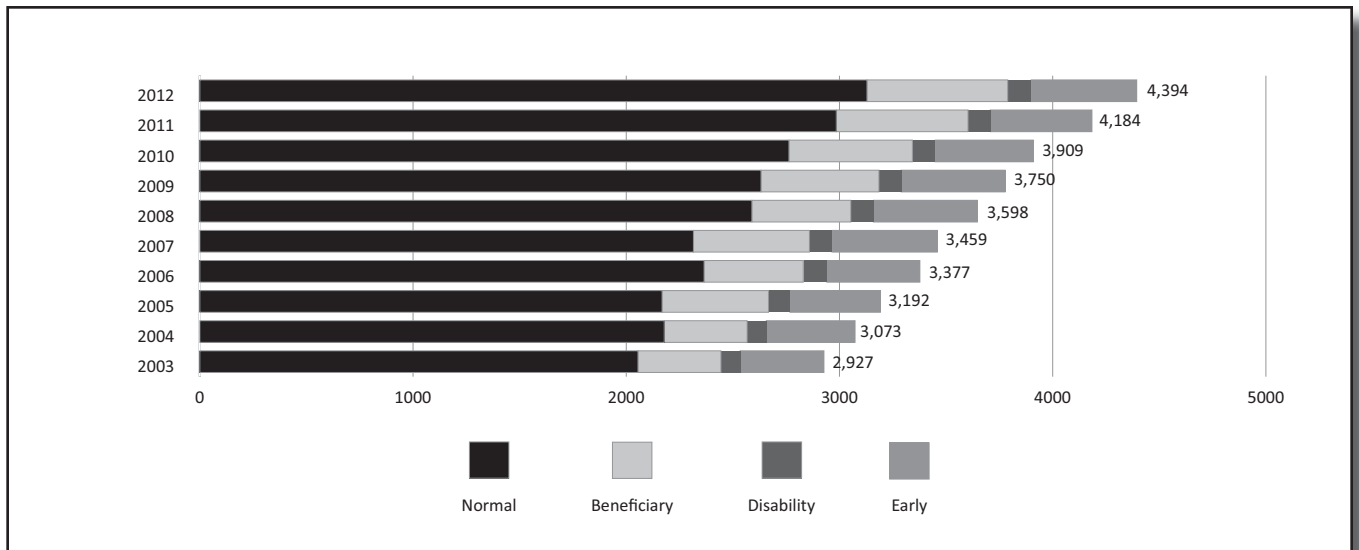
Active Members - Ten-Year Trend

Valuation Date 1/1



Retired Members - Ten-Year Trend

Valuation Date 1/1



Part II - Membership (continued)

**Distribution of Active Members**  
by Age and Service as of January 1, 2012

Age	Counts by Age/Service										Total
	1 year or less	1 to 2	2 to 3	3 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 30	30 & up	
Under 20	5	3	0	0	0	0	0	0	0	0	8
20 -24	66	34	24	27	7	0	0	0	0	0	158
25 - 29	70	82	68	131	102	5	0	0	0	0	458
30 - 34	66	66	54	108	271	78	2	0	0	0	645
35 - 39	56	54	55	114	240	217	61	0	0	0	797
40 - 44	66	56	48	137	279	274	169	103	3	0	1,135
45 - 49	71	57	40	132	303	257	201	220	87	13	1,381
50 - 54	64	55	49	107	302	260	205	233	165	179	1,619
55 - 59	54	47	32	103	265	245	195	232	127	279	1,579
60 - 64	29	19	16	45	139	143	113	146	66	140	856
65 & up	11	5	9	20	63	63	59	51	23	54	358
<b>Total</b>	<b>558</b>	<b>478</b>	<b>395</b>	<b>924</b>	<b>1,971</b>	<b>1,542</b>	<b>1,005</b>	<b>985</b>	<b>471</b>	<b>665</b>	<b>8,994</b>

**Distribution of Active Members**  
by Age/Service and Annual Salary as of January 1, 2012

Age	Average Salary by Age/Service										Total
	1 year or less	1 to 2	2 to 3	3 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 30	30 & up	
Under 20	\$12,874	\$34,766	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$21,084
20 -24	15,671	33,242	33,891	33,116	35,682	0	0	0	0	0	\$26,087
25 - 29	18,192	36,855	38,889	43,179	46,799	51,864	0	0	0	0	\$38,492
30 - 34	17,122	38,394	40,491	46,151	50,035	48,929	44,735	0	0	0	\$43,876
35 - 39	17,019	36,297	38,177	44,545	47,712	53,783	54,317	0	0	0	\$45,829
40 - 44	17,604	39,603	36,973	42,130	49,167	51,780	53,558	60,543	57,468	0	\$47,834
45 - 49	18,074	37,974	37,442	44,350	42,403	47,907	52,076	56,722	56,057	51,734	\$46,673
50 - 54	20,704	39,010	40,392	41,453	43,479	46,508	49,309	52,986	58,020	52,821	\$47,307
55 - 59	22,563	39,198	37,712	42,125	40,676	44,765	45,866	49,162	54,070	55,213	\$46,209
60 - 64	25,938	42,363	31,965	43,706	40,407	41,979	45,980	49,124	51,283	59,848	\$46,479
65 & up	19,131	20,423	31,382	28,309	30,446	34,285	37,951	41,125	45,053	47,789	\$36,851
<b>Average</b>	<b>\$18,649</b>	<b>\$37,715</b>	<b>\$37,941</b>	<b>\$42,799</b>	<b>\$44,670</b>	<b>\$47,645</b>	<b>\$49,163</b>	<b>\$52,523</b>	<b>\$55,012</b>	<b>\$54,874</b>	<b>\$45,366</b>

**Pensions in Payment Status on January 1, 2012**  
by Type and by Monthly Amount

Monthly amount	Total	Type of Pension				
		Normal	Involuntary early	Voluntary early	Service disability	Non-service disability
<b>Total</b>	<b>4,394</b>	<b>3,624</b>	<b>227</b>	<b>433</b>	<b>34</b>	<b>76</b>
Under \$100	217	186	21	8	1	1
\$100 - \$199	267	212	37	16	2	0
200 - 299	280	214	38	28	0	0
300 - 399	296	237	25	30	0	4
400 - 499	249	204	16	27	2	0
500 - 599	274	222	16	28	1	7
600 - 699	228	186	12	25	0	5
700 - 799	229	175	14	33	0	7
800 - 899	217	170	8	26	1	12
900 - 999	196	153	9	22	3	9
1,000 - 1,199	384	304	12	47	7	14
1,200 - 1,399	284	226	6	42	4	6
1,400 - 1,599	236	199	4	23	7	3
1,600 - 1,799	171	149	3	17	2	0
1,800 - 1,999	162	138	3	18	0	3
2,000 - 2,199	132	116	1	13	1	1
2,200 - 2,399	100	93	0	7	0	0
2,400 - 2,599	83	75	0	6	1	1
2,600 - 2,799	79	69	2	5	1	2
2,800 - 2,999	56	54	0	1	0	1
3,000 - 3,499	113	106	0	6	1	0
3,500 - 3,999	77	73	0	4	0	0
4,000 and over	64	63	0	1	0	0

### Pensions Awarded Each of the Last Ten Years by Type and Amount

Valuation Date 1/1	Type of Pension									
	Total		Normal		Voluntary early		Involuntary early		Disability	
	Count	AMA <sup>(1)</sup>	Sum	AMA	Sum	AMA	Sum	AMA	Sum <sup>(2)</sup>	AMA
2012	438	1,367	352	1,496	40	1,180	37	459	9(3)	888
2011	396	1,552	341	1,632	37	1,250	13	364	5(0)	1,407
2010	296	1,336	249	1,412	26	1,300	17	339	4(0)	1,067
2009	271	1,157	223	1,150	36	1,259	7	843	5(3)	1,162
2008	236	1,065	227	1,056	0	0	6	1,259	3(0)	1,350
2007	252	1,069	192	1,082	32	1,196	19	572	9(2)	1,373
2006	264	1,270	217	1,290	11	639	23	1,257	13(4)	1,493
2005	247	1,126	189	1,185	13	653	35	994	10(1)	1,100
2004	214	1,199	171	1,226	8	609	26	1,206	9(4)	1,199
2003	199	1,087	170	1,121	5	670	17	974	7(2)	837

### Schedule of Total Membership - Ten Year Trend

Valuation Date 1/1	Active Members Defined Benefit Plans	Active Members Cash Balance Plans	Retirees	Beneficiaries	Deferred Pensions <sup>(3)</sup>	Inactive Members <sup>(4)</sup>	Total
2012	7,836	1,158	3,899	495	952	21	14,361
2011	8,091	1,119	3,707	477	945	42	14,381
2010	8,357	994	3,449	460	834	23	14,117
2009	8,411	978	3,289	461	847	0	13,986
2008	8,383	950	3,173	425	744	7	13,682
2007	8,314	918	2,965	494	723	33	13,447
2006	8,374	896	2,941	436	675	66	13,388
2005	8,341	867	2,768	424	602	165	13,167
2004	8,491	902	2,657	416	546	230	13,242
2003	8,142	797	2,534	393	573	177	12,616

<sup>(1)</sup> Average Monthly Amount

<sup>(2)</sup> Number of service-related disability pensions are shown in parentheses.

<sup>(3)</sup> Inactive participants with rights to deferred pension (vested)

<sup>(4)</sup> Inactive participants with rights to return of contributions (non-vested)

### Schedule of Active Member Valuation Data

Last Ten Years

Defined Benefit Plans								
Valuation Date 1/1	Number of Active Members	Percentage Change in Membership	Number of Participating Employers	Percentage Increase in Number of Participating Employers	Total Annual Payroll	Percentage Increase in payroll	Average Annual Salary	Percentage Increase in Average Annual Salary
2012	7,836	(3.2)%	709	0.3%	\$366,882,467	(4.4)%	\$46,820	1.3%
2011	8,091	(3.2)	707	1.4	383,802,844	1.6	47,436	4.9
2010	8,357	(0.6)	697	0.1	377,960,930	1.5	\$45,227	2.2
2009	8,411	0.3	696	0.6	372,370,037	2.0	44,272	1.7
2008	8,383	0.8	692	1.3	364,865,000	1.7	43,524	0.9
2007	8,314	(0.7)	683	0.0	358,691,000	7.6	43,143	8.4
2006	8,374	0.4	683	0.9	333,300,000	4.5	39,807	4.1
2005	8,341	(1.8)	678	2.4	319,005,000	0.7	38,245	2.5
2004	8,491	4.3	662	1.0	316,703,000	7.9	37,299	3.5
2003	8,142	3.9	656	1.9	293,400,000	7.9	36,034	3.8
Cash Balance Plans								
Valuation Date 1/1	Number of Active Members	Percentage Change in Membership	Number of Participating Employers	Percentage Increase in Number of Participating Employers	Total Annual Payroll	Percentage Increase in payroll	Average Annual Salary	Percentage Increase in Average Annual Salary
2012	1158	3.5%	240	4.8%	\$41,143,383	(1.3)%	\$35,530	(4.6)%
2011	1119	12.6	229	13.4	41,683,065	18.8	37,250	5.5
2010	944	1.6	203	(0.5)	35,104,086	6.9	35,316	5.3
2009	978	3.0	204	11.0	32,811,919	5.5	33,550	2.5
2008	950	3.5	183	3.4	31,107,000	10.3	32,744	6.5
2007	918	2.5	177	2.9	28,213,000	1.0	30,734	(1.6)
2006	896	3.3	172	1.8	27,970,000	4.3	31,218	1.0
2005	867	(3.8)	169	(3.4)	26,808,000	6.0	30,920	10.3
2004	902	13.2	175	7.4	25,291,000	17.9	28,038	4.1
2003	797	7.8	163	5.8	21,459,000	12.2	26,925	4.0

**Schedule of Average New Monthly Benefit Payments from Defined Benefit Plans <sup>(1)</sup>**  
Eight Years Ended January 1, 2012

Retirement Effective Dates	Years Credited Service						
	< 5	5-10	10-15	15-20	20-25	25-30	30+
<b>Period 1/2/11 to 1/1/12</b>							
Average monthly benefit	\$256	410	673	1,059	1,476	2,083	3,203
Average final average salary	\$48,402	36,620	42,759	40,426	44,336	49,368	55,249
Number of retired members	12	31	42	50	54	30	61
<b>Period 1/2/10 to 1/1/11</b>							
Average monthly benefit	\$244	544	813	1,209	1,588	2,394	3,336
Average final average salary	\$50,215	39,201	39,197	43,014	43,653	54,686	58,242
Number of retired members	7	31	53	44	70	40	97
<b>Period 1/2/09 to 1/1/10</b>							
Average monthly benefit	\$151	392	729	1,294	1,653	2,247	3,020
Average final average salary	\$30,418	36,819	36,047	42,001	47,445	48,018	53,737
Number of retired members	17	30	26	39	47	40	65
<b>Period 1/2/08 to 1/1/09</b>							
Average monthly benefit	\$237	431	455	1,004	1,051	1,999	2,118
Average final average salary	\$29,979	35,106	32,921	45,862	35,792	50,659	50,249
Number of retired members	17	32	42	55	25	38	58
<b>Period 1/2/07 to 1/1/08</b>							
Average monthly benefit	\$179	374	685	999	1,338	1,739	2,530
Average final average salary	\$34,031	32,597	35,004	35,358	35,290	45,102	51,424
Number of retired members	11	34	45	43	33	32	38
<b>Period 1/2/06 to 1/1/07</b>							
Average monthly benefit	\$376	458	707	928	1,331	1,864	2,443
Average final average salary	\$38,487	38,257	31,807	43,304	40,141	45,548	50,429
Number of retired members	11	27	35	45	39	36	30
<b>Period 1/2/05 to 1/1/06</b>							
Average monthly benefit	\$686	386	661	1,052	1,330	1,912	2,292
Average final average salary	\$38,368	27,580	33,166	37,380	37,914	46,427	45,614
Number of retired members	11	27	37	44	36	44	60
<b>Period 1/2/04 to 1/1/05</b>							
Average monthly benefit	\$90	401	640	926	1,364	1,740	2,050
Average final average salary	\$27,628	35,862	27,960	36,563	37,558	41,400	40,845
Number of retired members	8	16	30	51	42	42	45

<sup>(1)</sup> Includes Normal Retirement, Early Retirement and Disability Benefits for new retirees in the years listed (excluding new retirees in Cash Balance plans).

# Schedule of Participating Pension Plans <sup>(1)(2)</sup>

as of January 1, 2012

<b>COUNTIES</b>	Big Beaver Borough	East Washington Borough
Adams County	Biglerville Borough	Emlenton Borough
Forest County	Biglerville Borough (CB)	Emporium Borough
Jefferson County	Bloomfield Borough	Etna Borough
Sullivan County	Bowmanstown Borough	Everett Borough
	Brackenridge Borough	Factoryville Borough
<b>CITIES</b>	Bridgeville Borough	Falls Creek Borough
Allentown City	Bridgewater Borough	Ferndale Borough
Bethlehem City	Brockway Borough	Forest City Borough
Clairton City	Brookville Borough	Fountain Hill Borough
Connellsville City	California Borough	Franklin Borough
Easton City	Cambridge Springs Borough	Franklintown Borough
Farrell City	Camp Hill Borough	Freeburg Borough
Greensburg City	Carnegie Borough	Freedom Borough
Harrisburg City	Carroll Valley Borough	Freeland Borough
Hermitage City	Carrolltown Borough	Greenville Borough
Jeannette City	Centerville Borough	Hollidaysburg Borough
Latrobe City	Central City Borough	Homer City Borough
Lebanon City	Charleroi Borough	Honey Brook Borough
Lower Burrell City	Claysville Borough	Hughestown Borough
Nanticoke City	Clymer Borough	Hummelstown Borough
New Kensington City	Coaldale Borough	Huntingdon Borough
Sharon City	Cochranton Borough	Hyndman Borough
Sunbury City	Collegeville Borough	Jim Thorpe Borough
Uniontown City	Collingdale Borough	Johnsonburg Borough
	Conneautville Borough	Kenhorst Borough
<b>BOROUGHS</b>	Conshohocken Borough	Kennett Square Borough
Adamstown Borough	Conway Borough	Kittanning Borough
Apollo Borough	Cressona Borough	Knox Borough
Ashland Borough	Dalton Borough	Kulpmont Borough
Atglen Borough	Deemston Borough	Kutztown Borough
Atglen Borough (CB)	Delmont Borough	Lehighton Borough
Avonmore Borough	Derry Borough	Lewistown Borough
Bally Borough	Dravosburg Borough	Liberty Borough
Bangor Borough	Dublin Borough	Linesville Borough
Bedford Borough	Duboistown Borough	Lykens Borough
Bellefonte Borough	Duncannon Borough	Marcus Hook Borough
Bellefonte Borough (CB)	Duncansville Borough	Mars Borough
Bellwood Borough	East Berlin Borough	Martinsburg Borough
Bentleyville Borough	East Greenville Borough	Marysville Borough
Berlin Borough	East Rochester Borough	Matamoras Borough
Berlin Borough (CB)	East Stroudsburg Borough	Mayfield Borough

<sup>(1)</sup> County names are in parentheses.

<sup>(2)</sup> The abbreviation CB designates a Cash Balance plan. NU denotes a Non-uniformed plan.



Schedule of Participating Pension Plans (continued)

Mercer Borough	Rouseville Borough	York Springs Borough
Meyersdale Borough	Rural Valley Borough	Youngwood Borough
Middleburg Borough	Salisbury Borough	
Millersburg Borough	Sandy Lake Borough	<b>TOWNSHIPS OF THE FIRST CLASS</b>
Millerstown Borough	Saxton Borough	Bristol Township
Minersville Borough	Schuylkill Haven Borough	Caln Township
Monaca Borough	Selinsgrove Borough	Collier Township
Monroeville Municipality	Sellersville Borough	Crescent Township
Mont Alto Borough	Seven Fields Borough	East Deer Township
Montrose Borough	Seven Fields Borough (CB)	Elizabeth Township (Allegheny County)
Moosic Borough	Shamokin Dam Borough	Harrison Township
Moosic Borough (CB)	Sharpsburg Borough	Hopewell Township (Beaver County)
Morrisville Borough	Sharpsville Borough	North Huntingdon Township
Moscow Borough	Shenandoah Borough	North Versailles Township
Mount Jewett Borough	Shippingport Borough	Ridley Township
Mount Pleasant Borough	Slippery Rock Borough	Rochester Township
Mount Union Borough	Smithton Borough	Salisbury Township
Mt. Gretna Borough	South Waverly Borough	Springdale Township
Nanty Glo Borough	Southmont Borough	Swatara Township
Narberth Borough	Springdale Borough	Upper Moreland Township
Nesquehoning Borough	Stewartstown Borough	Vanport Township
New Eagle Borough	Summit Hill Borough	West Pottsgrove Township
New Florence Borough	Tarentum Borough	Whitehall Township
New Stanton Borough	Telford Borough	Wilkins Township
Newport Borough	Topton Borough	
Newtown Borough	Trainer Borough	<b>TOWNSHIPS OF THE SECOND CLASS</b>
Norristown Borough	Turbotville Borough	Allegheny Township (Westmoreland County)
North East Borough	Turtle Creek Borough	Antrim Township
Northumberland Borough	Verona Borough	Athens Township
Orwigsburg Borough	Versailles Borough	Bald Eagle Township
Palmerton Borough	Waterford Borough	Bedminster Township
Palmyra Borough	Waynesburg Borough	Bell Township
Pen Argyl Borough	West Grove Borough	Bethel Township
Pennsburg Borough	West Middlesex Borough	Birmingham Township
Perkasie Borough	West Newton Borough	Black Creek Township
Pine Grove Borough	Wheatland Borough	Blair Township
Portage Borough	White Haven Borough	Bloomfield Township
Pottstown Borough	Williamstown Borough	Blooming Grove Township
Pringle Borough	Wilmerding Borough	Boggs Township (Centre County)
Prospect Park Borough	Wilson Borough	Boggs Township (Clearfield County)
Ridley Park Borough	Windsor Borough	Brecknock Township
Roaring Spring Borough	Yardley Borough	Briar Creek Township
Rochester Borough	Yoe Borough	Brighton Township

Schedule of Participating Pension Plans (continued)

Broad Top Township	Douglass Township (Montgomery County)	Haycock Township
Brothersvalley Township	Drumore Township	Hemlock Township
Brown Township	East Allen Township	Henderson Township
Buckingham Township	East Carroll Township	Hilltown Township
Buffalo Township	East Coventry Township	Hopewell Township (Cumberland County)
Burnside Township	East Fallowfield Township	Hopewell Township (Washington County)
Burrell Township	East Finley Township	Hopewell Township (York County)
Caernarvon Township	East Hanover Township	Horsham Township
Cambria Township	East Huntingdon Township	Howe Township
Cambridge Township	East Manchester Township	Hunlock Township
Canton Township	East Marlborough Township	Huntington Township
Cass Township	East Rockhill Township	Huston Township
Center Township (Greene County)	Eldred Township (Jefferson County)	Jackson Township (Greene County)
Center Township (Indiana County)	Eldred Township (Monroe County)	Jackson Township (Lebanon County)
Center Township (Snyder County)	Eldred Township (Warren County)	Jackson Township (Luzerne County)
Centre Township (Berks County)	Elizabeth Township (Lancaster County)	Jackson Township (Snyder County)
Centre Township (Perry County)	Elk Creek Township	Jackson Township (Susquehanna County)
Cherrytree Township	Elk Township	Jefferson Township (Washington County)
Clarion Township	Fairfield Township	Jenks Township
Clay Township	Fairview Township	Jenner Township
Clearfield Township	Falls Township	Jones Township
Columbus Township	Farmington Township	Keating Township
Concord Township	Forks Township	Kennett Township
Conemaugh Township	Forward Township	Lancaster Township (Butler County)
Conewago Township	Foster Township	Lancaster Township (Lancaster County)
Coolspring Township	Franklin Township (Beaver County)	Latimore Township
Cornplanter Township	Franklin Township (Butler County)	LeBoeuf Township
Corydon Township	Franklin Township (Carbon County)	Lehman Township
Covington Township	Franklin Township (Greene County)	Liberty Township
Cranberry Township	Frazer Township	Limestone Township (Lycoming County)
Cross Creek Township	Freedom Township	Limestone Township (Union County)
Darlington Township	Freehold Township	Lincoln Township
Delaware Township	Frenchcreek Township	Liverpool Township
Derry Township (Dauphin County)	Girard Township	London Britain Township
Derry Township (Dauphin County) (CB)	Glade Township	London Grove Township
Derry Township (Mifflin County)	Greene Township	Lower Mahanoy Township
Derry Township (Westmoreland County)	Greenfield Township (Blair County)	Lower Towamensing Township
Dickinson Township	Greenfield Township (Erie County)	Lower Yoder Township
Dingman Township	Greenfield Township (Lackawanna County)	Loyalhanna Township
Donegal Township (Butler County)	Hamilton Township	Loyalhanna Township (CB)
Donegal Township (Washington County)	Hamiltonban Township	Mahoning Township
Donegal Township (Westmoreland County)	Hanover Township (Beaver County)	Manchester Township
Dorrance Township	Hanover Township (Lehigh County)	Manchester Township (CB)

Schedule of Participating Pension Plans (continued)

McKean Township	Pocopson Township	Stonycreek Township
Mead Township	Point Township	Sugar Grove Township
Middle Smithfield Township	Portage Township	Sullivan Township
Middlesex Township	Porter Township	Summit Township
Milford Township (Bucks County)	Preston Township	Tinicum Township
Milford Township (Pike County)	Price Township	Towamensing Township
Millcreek Township	Providence Township	Tredyffrin Township
Monongahela Township	Pulaski Township	Tunkhannock Township
Monroe Township (Snyder County)	Pymatuning Township	Union Township (Berks County)
Monroe Township (Wyoming County)	Raccoon Township	Union Township (Lebanon County)
Morris Township (Greene County)	Rice Township	Union Township (Snyder County)
Morris Township (Tioga County)	Richhill Township	Union Township (Washington County)
Morris Township (Washington County)	Richland Township	Unity Township
Mount Joy Township	Richland Township (CB)	Upper Burrell Township
Mount Pleasant Township	Ridgway Township	Upper Nazareth Township
Muncy Creek Township	Rome Township	Wallace Township
New Garden Township	Rose Township	Warrington Township
New Sewickley Township	Ross Township	Warsaw Township
Nockamixon Township	Rutland Township	Warwick Township
North Buffalo Township	Rye Township	Washington Township (Berks County)
North Coventry Township	Scott Township	Washington Township (Cambria County)
North Franklin Township	Sewickley Township	Washington Township (Dauphin County)
North Strabane Township	Shade Township	Washington Township (Erie County)
North Strabane Township (CB)	Sheffield Township	Washington Township (Fayette County)
Nottingham Township	Shippensburg Township	Washington Township (Greene County)
Oakland Township	Shrewsbury Township	Washington Township (Jefferson County)
Oil Creek Township (Venango County)	Slippery Rock Township	Washington Township (Northampton County)
Oil Creek Township (Crawford County)	Snake Spring Township	Washington Township (Schuylkill County)
Old Lycoming Township	Solebury Township	Washington Township (Westmoreland County)
Oliver Township	Solebury Township (CB)	Washington Township (Wyoming County)
Paint Township	South Abington Township	Wayne Township
Paradise Township	South Beaver Township	West Bradford Township
Pennsbury Township	South Bend Township	West Brunswick Township
Perry Township	South Franklin Township	West Caln Township
Pike Township	South Huntingdon Township	West Carroll Township
Pine Creek Township	South Manheim Township	West Fallowfield Township
Pine Grove Township (Schuylkill County)	South Middleton Township	West Lampeter Township
Pine Grove Township (Warren County)	South Pymatuning Township	West Pennsboro Township
Pittsfield Township	South Strabane Township	West Rockhill Township
Pleasant Township	Southampton Township	West Salem Township
Plumcreek Township	Southwest Township	West Wheatfield Township
Plumstead Township	Spring Creek Township	Westtown Township
Plymouth Township	Springfield Township	Wetmore Township

Schedule of Participating Pension Plans (continued)

Whiteley Township	Decatur Township Police	Hummelstown Borough Police
Wiconisco Township	Delmont Borough Police	Hyndman Borough Police
Williams Township	Donegal Township Police (Washington County)	Independence Township Police
Windsor Township	Douglass Township Police (Berks County)	Jackson Township Police (Luzerne County)
Woodward Township	Douglass Township Police (Montgomery County)	Johnsonburg Borough Police
Wright Township	Dublin Borough Police	Knox Borough Police
Wrightstown Township	Duboistown Borough Police	Lancaster Township Police (Butler County)
Zerbe Township	Dunbar Borough Police	Larksville Borough Police
<b>POLICE</b>	Duncannon Borough Police	Lewistown Borough Police
Apollo Borough Police	Duncansville Borough Police	Liberty Borough Police
Ashley Borough Police	East Bangor Borough Police	Linesville Borough Police
Bally Borough Police	East Berlin Borough Police	Locust Township Police
Barrett Township Police	East Coventry Township Police	Lower Windsor Township Police
Bedminster Township Police	East Deer Township Police	Lower Yoder Township Police
Bellwood Borough Police	East Fallowfield Township Police	Lykens Borough Police
Bentleyville Borough Police	East Marlborough Township Police	Mahoning Township Police (Lawrence County)
Bentleyville Borough Police (CB)	East Pennsboro Twp Police	Mahoning Township Police (Montour County)
Berks-Lehigh Regional Police	East Washington Borough Police	Manor Borough Police
Big Beaver Borough Police	Elizabeth Township Police (Allegheny County)	Mars Borough Police
Biglerville Borough Police	Emlenton Borough Police	Martinsburg Borough Police
Birmingham Township Police	Emporium Borough Police	Marysville Borough Police
Blair Township Police	Everett Borough Police	Mayfield Borough Police
Brecknock Township Police	Factoryville Borough Police	Mead Township Police
Briar Creek Township Police	Fairview Township Police	Mercer Borough Police
Bridgewater Borough Police	Falls Creek Borough Police	Middleburg Borough Police
Buckingham Township Police	Farrell City Police	Middlesex Township Police
California Borough Police	Forest City Borough Police	Millcreek Township Police
Cambria Township Police	Forward Township Police	Millersburg Borough Police
Cambridge Springs Borough Police	Franklin Borough Police	Millville Borough Police
Camp Hill Borough Police	Franklin Township Police (Beaver County)	Montour Township Police
Carroll Township Police	Frazer Township Police	Moore Township Police
Carroll Valley Borough Police	Freedom Borough Police (Beaver County)	Moosic Borough Police
Central City Borough Police	Freedom Township Police	Morrisville Borough Police
Centre Township Police (Berks County)	Gilpin Township Police	Moscow Borough Police
Clairton Police	Greenfield Township Police	Mount Jewett Borough Police
Clymer Borough Police	Greenville Borough Police	Mount Pleasant Borough Police
Cochranton Borough Police	Hamiltonban Township Police	Mount Pleasant Township Police (Washington County)
Colebrookdale Township Police	Harveys Lake Borough Police	Mount Union Borough Police
Conneaut Lake Regional Police	Heidelberg Township Police	New Garden Township Police
Covington Township Police	Hellam Township Police	New Wilmington Borough Police
Crescent Township Police	Hemlock Township Police	Newport Borough Police
Danville Borough Police	Hilltown Township Police	Newtown Borough Police
Darlington Township Police	Honey Brook Borough Police	Nockamixon Township Police

Schedule of Participating Pension Plans (continued)

North Coventry Township Police	Sandy Lake Borough Police	Vanport Township Police
North Huntingdon Township Police	Saxton Borough Police	Versailles Borough Police
North Middleton Township Police	Schwenksville Borough Police	Washington Township Police (Fayette County)
North Sewickley Township Police	Scott Township Police	Waverly Township Police
Northeastern Regional Police Department	Scottdale Borough Police	West Caln Township Police
Northumberland Borough Police	Selinsgrove Borough Police	West Fallowfield Township Police
Ohio Township Police	Shade Township Police	West Grove Borough Police
Old Lycoming Township Police	Shamokin Dam Borough Police	West Lampeter Township Police
Orangeville Area Police Board	Sheffield Township Police	West Middlesex Borough Police
Orwigsburg Borough Police	Shippingport Borough Police	West Pikeland Township Police
Palmyra Borough Police	Shiremanstown Borough Police	West Pottsgrove Township Police
Paxtang Borough Police	Sinking Spring Borough Police	West Sadsbury Township Police
Penbrook Borough Police	South Beaver Township Police	West Vincent Township Police
Pennridge Regional Police Dept	South Centre Township Police	Westfield Borough Police
Perkasie Borough Police	South Pymatuning Township Police	Wheatland Borough Police
Pine Grove Borough Police	South Waverly Borough Police	White Haven Borough Police
Point Township Police	South Williamsport Borough Police	Wiconisco Township Police
Polk Borough Police	Southern Police Commission	Williamstown Borough Police
Pulaski Township Police	Springdale Township Police	Windsor Borough Police
Pymatuning Township Police	Stewartstown Borough Police	Windsor Township Police
Quarryville Borough Police	Summit Hill Borough Police	Wrightstown Township Police
Red Lion Police	Telford Borough Police	Yardley Borough Police
Redstone Township Police	Tinicum Township Police	Youngwood Borough Police
Richland Township Police	Tulpehocken Township Police	
Roaring Spring Borough Police	Tunkhannock Township Police	
Rochester Township Police	Upper Burrell Township Police	
Rye Township Police		

<b>FIREFIGHTERS</b>	Armstrong Conservation District
Clairton City	Avonmore Borough Municipal Authority
Farrell City	B.A.R.T.A.
Greenville Borough	Bath Borough Authority
Harrisburg City	Bedford Borough Water Authority
Larksville Borough	Belle Vernon Municipal Authority
Manchester Twp	Berks-Lehigh Regional Police NU
South Strabane Township	Bethlehem Authority
Upper Moreland Township	Bethlehem City Redevelopment Authority
Wilson Borough	Bloomfield Township Sewer Authority
	Bradford City Water Authority
	Bradford Regional Airport Authority
<b>AUTHORITIES &amp; OTHER UNITS</b>	Brighton Township Municipal Authority
Allegheny Valley Joint Sewer Authority	Brighton Township Sewer Authority
Ambridge Borough Municipal Authority	

Schedule of Participating Pension Plans (continued)

Brockway Area Sewage Authority	Emlenton Area Municipal Authority
Brockway Borough Municipal Authority	Erie County Housing Authority
Brodhead Creek Regional Authority	Everett Area Municipal Authority
Brookville Municipal Authority	Fairfield Municipal Authority
Bucks County Redevelopment Authority	Fawn Township Sewage Authority
Bucks County Water & Sewer Authority	Fawn-Frazer Joint Water Authority
Burrell Township Sewage Authority	Fayette County Conservation District
Butler Area Public Library	Forward Township Municipal Authority
Cambria County Conservation & Recreation Authority	Franklin City Housing Authority
Cambria Township Sewer Authority	Franklin Township Municipal Sanitary Authority
Cambria Township Water Authority	Franklin Township Sewer Authority
Carbon County Conservation District	Frazer Transportation Authority
Carmichaels-Cumberland Joint Sewer	Fredericksburg Sewer & Water Authority
Carroll Township Authority	Freeland Borough Municipal Authority
Catawissa Borough Municipal Water Authority	Greater Lebanon Refuse Authority
Centerville Borough Sanitary Authority	Greenville Municipal Authority
Central Carbon Municipal Authority	Guilford Township Authority
Central Indiana County Joint Sanitary Authority	Guilford Water Authority
Centre County Library & Historical Museum	Harrison Township Water Authority
Clarion County Housing Authority	Hawley Area Authority
Clarion County Housing Authority (CB)	Hazleton Transit Authority
Coaldale-Lansford-Summit Hill Sewer Authority	Hellertown Borough Authority
Columbia County Conservation District	Hilltown Township Water & Sewer Authority
Connellsville Municipal Authority	Horsham Township Sewer Authority
Connellsville Redevelopment Authority	Hughesville-Wolf Township Joint Municipal Authority
Conshohocken Borough Authority	Indiana County Conservation District
Coplay-Whitehall Sewer Authority	Indiana County Solid Waste Authority
Cressona Borough Authority	Jackson Township Water Authority
Creswell Heights Joint Authority	Jeannette Municipal Authority
Cumberland-Franklin Joint Municipal Authority	Jefferson Conservation District
Curwensville Municipal Authority	Jenner Area Joint Sewer Authority
Delaware Valley Municipal Management Association	Johnsonburg Municipal Authority
Derry Township Municipal Authority	Juniata County Conservation District
Derry Township Sanitary Sewer Authority	Kiskiminetas Township Municipal Authority
DuBois City Redevelopment Authority	Kittanning Suburban Joint Water Authority
DuFAST Authority	Kulpmont-Marion Heights JMA
East Berlin Area Joint Authority	Lancaster City Parking Authority
East Norriton-Plymouth-Whitpain Joint Sewer Authority	Lansford - Coaldale Joint Water Authority
Eastern Snyder County Regional Authority	Lebanon City Authority
Economy Borough Municipal Authority	Lebanon Community Library
Elizabeth Borough Municipal Authority	Leetsdale Borough Municipal Authority
Elizabeth Township Sanitary Authority	Lehigh County Authority
Elizabethville Area Authority	Lehighon Water Authority

## Schedule of Participating Pension Plans (continued)

Linesville Pine Joint Municipal Authority	Newport Borough Water Authority
Lower Bucks County Joint Municipal Authority	Norristown Municipal Waste Authority
Lower Bucks County Joint Municipal Authority Supervisors	North & South Shenango Joint Municipal Authority
Lower Indiana County Municipal Authority	North Coventry Municipal Authority
Lower Mahanoy Township Municipal Authority	North Huntingdon Township Municipal Authority
Lower Providence Township Sewer Authority	North Middleton Authority
Luzerne Conservation District	North Strabane Township Municipal Authority
Lycoming Sanitary Committee	Northampton Borough Municipal Authority
Mahanoy Township Authority	Northampton Borough Municipal Authority (CB)
Mahoning Township Authority	Northeastern Regional Police (NU)
Maidencreek Township Authority	Northern Lancaster County Authority
Manheim Borough Authority	Northern York County Regional Police (NU)
Manor Township Joint Municipal Authority	Northumberland Sewer Authority
Mary Meuser Memorial Library	Northwest Regional Lancaster County Police (NU)
Matamoras Municipal Authority	Oil City Housing Authority
McKean County Solid Waste Authority	PA League Of Cities & Municipalities
Mercer County Regional Planning Commission	Parks Township Municipal Authority
Mid Mon Valley Water Authority	Penn Township Sewage Authority
Middlesex Township Municipal Authority	Pennridge Regional Police (NU)
Middletown Township Sewer Authority	Pennridge Waste Treatment Authority
Mifflin County Regional Police NU	Perkasie Borough Authority
Mifflintown Municipal Authority	Peters Creek Sanitary Authority
Milford Water Authority	Peters Township Municipal Authority
Millcreek - Richland Joint Authority	Portage Area Sewer Authority
Millersburg Area Authority	Portage Borough Municipal Auth
Mon Valley Sewage Authority	Possum Valley Municipal Authority
Monroe County Control Center	Reynoldsville Water Authority
Montgomery County Sewer Authority	Riverview Sanitary Authority
Montour County Conservation District	Robesonia-Wernersville Municipal Authority
Montrose Municipal Authority	Robinson Township Municipal Authority
Moon Township Municipal Authority	Rochester Area Joint Sewer Authority
Morrisville Borough Municipal Authority	Rostraver Township Sewer Authority
Mount Joy Township Authority	Saxton Borough Municipal Authority
Mount Pleasant Township Municipal Authority	Seward/St. Clair Township Sanitary Authority
Mount Pocono Municipal Authority	Shade-Central City Joint Authority
Mt. Jewett Borough Authority	Shamokin City Redevelopment Authority
Mt. Lebanon Parking Authority	Shannock Valley General Services Authority
Myerstown Community Library Association	Sharon Sanitary Authority
Myerstown Water Authority	Sheffield Township Municipal Authority
Nanty Glo Sanitary Sewer Authority	Slippery Rock Municipal Authority
Nanty Glo Water Authority	Smithton Borough Municipal Authority
Nesquehoning Borough Authority	Snake Spring Township Authority
New Kensington Municipal Sanitary Authority	Somerset Conservation District
New Kensington Redevelopment Authority	South Fayette Township Municipal Authority



Schedule of Participating Pension Plans (continued)

South Middleton Township Municipal Authority  
 Southern Police Commission NU  
 Southwest Regional Dispatch Center  
 Southwestern Pa Water Authority  
 Southwestern Regional Police NU  
 St. Marys Area Water Authority  
 Sunbury Municipal Authority  
 Susquehanna Township Authority  
 Swatara Township Authority  
 Tower City Borough Authority  
 Township of Falls Authority  
 Tri-County COG IBC  
 Tri-County Joint Municipal Authority  
 Twin Boroughs Sanitary Authority  
 Upper Allegheny Joint Sanitary Authority  
 Upper Montgomery Joint Authority  
 Upper Southampton Municipal Authority  
 Vanport Township Municipal Authority  
 Vernon Township Sanitary Authority  
 Vernon Township Water Authority

Warren County Housing Authority  
 Warren County Solid Waste Authority  
 Warwick Township Municipal Authority  
 Washington Area COG  
 Washington Township Municipal Authority (Berks County)  
 Washington Township Municipal Authority (Fayette County)  
 Waterford Borough Municipal Authority  
 Wayne County Redevelopment Authority  
 Wernersville Municipal Authority  
 West Carroll Township Water & Sewer Authority  
 Western Butler County Authority  
 Western Clinton County Municipal Authority  
 Western Westmoreland Municipal Authority  
 Westmoreland-Fayette Municipal San Authority  
 White Run Regional Municipal Authority  
 Whitehall Township Authority  
 Williamstown Borough Authority  
 Womelsdorf-Robesononia Joint Authority  
 York County Planning Commission



P.O. Box 1165  
Harrisburg, PA 17108-1165

Telephone: 717-787-2065; 1-800-622-7968  
Fax: 717-783-8363

Website: [www.pmrs.state.pa.us](http://www.pmrs.state.pa.us)  
E-Mail: [ra-staff@pa.gov](mailto:ra-staff@pa.gov)

**2012 PMRS Comprehensive Annual Financial Report**